

Supplementary information

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Example of dataset for bolus administration

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_start)),
          dose=as.data.frame(puzzle::df_dose_start),
          cov=as.data.frame(puzzle::df_cov_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(0),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov))
```

```
## Automatic coercion to numeric for CMT
## 1=parent
```

```
## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	1	0	0	.	0	77	1
	1	1.0	1.0	0	0	1	.	1	0	10.8	2.4	0	77	1
	1	4.0	4.0	0	0	1	.	1	0	7.6	2	0	77	1
	1	12.0	12.0	0	0	1	.	1	0	2.3	0.8	0	77	1
	1	24.0	0.0	24	0	2	200	1	1	.	.	1	77	1
	1	24.0	0.0	24	24	2	.	1	0	0	.	0	77	1
	1	25.0	1.0	24	24	2	.	1	0	24.2	3.2	0	77	1
	2	0.0	0.0	0	0	1	100	1	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	.	1	0	0	.	0	82	0
	2	0.9	0.9	0	0	1	.	1	0	7.3	2	0	82	0
	2	3.8	3.8	0	0	1	.	1	0	4	1.4	0	82	0
	2	12.2	12.2	0	0	1	.	1	0	1.1	0.1	0	82	0
	2	24.0	0.0	24	0	2	200	1	1	.	.	1	82	0
	2	24.0	0.0	24	24	2	.	1	0	0	.	0	82	0
	2	25.1	1.1	24	24	2	.	1	0	14.1	2.6	0	82	0

Example of dataset for oral administration

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_start)),
          dose=as.data.frame(puzzle::df_dose_start),
          cov=as.data.frame(puzzle::df_cov_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov))
```

```
## Automatic coercion to numeric for CMT
## 2=parent
```

```
## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	2	0	0	.	0	77	1
	1	1.0	1.0	0	0	1	.	2	0	10.8	2.4	0	77	1
	1	4.0	4.0	0	0	1	.	2	0	7.6	2	0	77	1
	1	12.0	12.0	0	0	1	.	2	0	2.3	0.8	0	77	1
	1	24.0	0.0	24	0	2	200	1	1	.	.	1	77	1
	1	24.0	0.0	24	24	2	.	2	0	0	.	0	77	1
	1	25.0	1.0	24	24	2	.	2	0	24.2	3.2	0	77	1
	2	0.0	0.0	0	0	1	100	1	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	.	2	0	0	.	0	82	0
	2	0.9	0.9	0	0	1	.	2	0	7.3	2	0	82	0
	2	3.8	3.8	0	0	1	.	2	0	4	1.4	0	82	0
	2	12.2	12.2	0	0	1	.	2	0	1.1	0.1	0	82	0
	2	24.0	0.0	24	0	2	200	1	1	.	.	1	82	0
	2	24.0	0.0	24	24	2	.	2	0	0	.	0	82	0
	2	25.1	1.1	24	24	2	.	2	0	14.1	2.6	0	82	0

Example of dataset for parallel zero and first order absorption

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_start)),
          dose=as.data.frame(puzzle::df_dose_start),
          cov=as.data.frame(puzzle::df_cov_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(0,1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov))
```

```
## Automatic coercion to numeric for CMT
## 2=parent
```

```
## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	RATE	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	0	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	100	-2	2	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	.	2	0	0	.	0	77	1
	1	1.0	1.0	0	0	1	.	.	2	0	10.8	2.4	0	77	1
	1	4.0	4.0	0	0	1	.	.	2	0	7.6	2	0	77	1
	1	12.0	12.0	0	0	1	.	.	2	0	2.3	0.8	0	77	1
	1	24.0	0.0	24	0	2	200	0	1	1	.	.	1	77	1
	1	24.0	0.0	24	24	2	200	-2	2	1	.	.	1	77	1
	1	24.0	0.0	24	24	2	.	.	2	0	0	.	0	77	1
	1	25.0	1.0	24	24	2	.	.	2	0	24.2	3.2	0	77	1
	2	0.0	0.0	0	0	1	100	0	1	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	100	-2	2	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	.	.	2	0	0	.	0	82	0
	2	0.9	0.9	0	0	1	.	.	2	0	7.3	2	0	82	0
	2	3.8	3.8	0	0	1	.	.	2	0	4	1.4	0	82	0
	2	12.2	12.2	0	0	1	.	.	2	0	1.1	0.1	0	82	0
	2	24.0	0.0	24	0	2	200	0	1	1	.	.	1	82	0
	2	24.0	0.0	24	24	2	200	-2	2	1	.	.	1	82	0
	2	24.0	0.0	24	24	2	.	.	2	0	0	.	0	82	0
	2	25.1	1.1	24	24	2	.	.	2	0	14.1	2.6	0	82	0

Example of dataset for sequential zero and first order absorption

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_start)),
          dose=as.data.frame(puzzle::df_dose_start),
          cov=as.data.frame(puzzle::df_cov_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(0,1),
        parallel = F,
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov))

## Automatic coercion to numeric for CMT
## 2=parent

## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	RATE	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	-2	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	.	2	0	0	.	0	77	1
	1	1.0	1.0	0	0	1	.	.	2	0	10.8	2.4	0	77	1
	1	4.0	4.0	0	0	1	.	.	2	0	7.6	2	0	77	1
	1	12.0	12.0	0	0	1	.	.	2	0	2.3	0.8	0	77	1
	1	24.0	0.0	24	0	2	200	-2	1	1	.	.	1	77	1
	1	24.0	0.0	24	24	2	.	.	2	0	0	.	0	77	1
	1	25.0	1.0	24	24	2	.	.	2	0	24.2	3.2	0	77	1
	2	0.0	0.0	0	0	1	100	-2	1	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	.	.	2	0	0	.	0	82	0
	2	0.9	0.9	0	0	1	.	.	2	0	7.3	2	0	82	0
	2	3.8	3.8	0	0	1	.	.	2	0	4	1.4	0	82	0
	2	12.2	12.2	0	0	1	.	.	2	0	1.1	0.1	0	82	0
	2	24.0	0.0	24	0	2	200	-2	1	1	.	.	1	82	0
	2	24.0	0.0	24	24	2	.	.	2	0	0	.	0	82	0
	2	25.1	1.1	24	24	2	.	.	2	0	14.1	2.6	0	82	0

Example of dataset for complex absorption

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_start)),
          dose=as.data.frame(puzzle::df_dose_start),
          cov=as.data.frame(puzzle::df_cov_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1,1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov))
```

```
## Automatic coercion to numeric for CMT
## 3=parent
```

```
## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	100	2	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	3	0	0	.	0	77	1
	1	1.0	1.0	0	0	1	.	3	0	10.8	2.4	0	77	1
	1	4.0	4.0	0	0	1	.	3	0	7.6	2	0	77	1
	1	12.0	12.0	0	0	1	.	3	0	2.3	0.8	0	77	1
	1	24.0	0.0	24	0	2	200	1	1	.	.	1	77	1
	1	24.0	0.0	24	24	2	200	2	1	.	.	1	77	1
	1	24.0	0.0	24	24	2	.	3	0	0	.	0	77	1
	1	25.0	1.0	24	24	2	.	3	0	24.2	3.2	0	77	1
	2	0.0	0.0	0	0	1	100	1	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	100	2	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	.	3	0	0	.	0	82	0
	2	0.9	0.9	0	0	1	.	3	0	7.3	2	0	82	0
	2	3.8	3.8	0	0	1	.	3	0	4	1.4	0	82	0
	2	12.2	12.2	0	0	1	.	3	0	1.1	0.1	0	82	0
	2	24.0	0.0	24	0	2	200	1	1	.	.	1	82	0
	2	24.0	0.0	24	24	2	200	2	1	.	.	1	82	0
	2	24.0	0.0	24	24	2	.	3	0	0	.	0	82	0
	2	25.1	1.1	24	24	2	.	3	0	14.1	2.6	0	82	0

Example of dataset with adding extra times

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_start)),
          dose = as.data.frame(puzzle::df_dose_start),
          cov = as.data.frame(puzzle::df_cov_start))
extra_times = as.data.frame(puzzle::df_extra_times)
readr::write_csv(extra_times, "extra_times.csv")
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov),
        extratimes=list(name="extra_times.csv"))
```

```
## Automatic coercion to numeric for CMT
## 2=parent
```

```
## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	EXTRATIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	0	1	100	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	0	1	.	2	0	0	.	0	77	1
	1	1.0	1.0	0	0	0	1	.	2	0	10.8	2.4	0	77	1
	1	1.1	1.1	0	0	1	1	.	2	2	.	.	1	77	1
	1	1.2	1.2	0	0	1	1	.	2	2	.	.	1	77	1
	1	1.3	1.3	0	0	1	1	.	2	2	.	.	1	77	1
	1	1.4	1.4	0	0	1	1	.	2	2	.	.	1	77	1
	1	1.5	1.5	0	0	1	1	.	2	2	.	.	1	77	1
	1	1.6	1.6	0	0	1	1	.	2	2	.	.	1	77	1
	1	1.7	1.7	0	0	1	1	.	2	2	.	.	1	77	1
	1	1.8	1.8	0	0	1	1	.	2	2	.	.	1	77	1
	1	1.9	1.9	0	0	1	1	.	2	2	.	.	1	77	1
	1	2.0	2.0	0	0	1	1	.	2	2	.	.	1	77	1
	1	2.1	2.1	0	0	1	1	.	2	2	.	.	1	77	1
	1	2.2	2.2	0	0	1	1	.	2	2	.	.	1	77	1
	1	2.3	2.3	0	0	1	1	.	2	2	.	.	1	77	1
	1	2.4	2.4	0	0	1	1	.	2	2	.	.	1	77	1

1	2.5	2.5	0	0	1	1	.	2	2	.	.	1	77	1
1	2.6	2.6	0	0	1	1	.	2	2	.	.	1	77	1
1	2.7	2.7	0	0	1	1	.	2	2	.	.	1	77	1
1	2.8	2.8	0	0	1	1	.	2	2	.	.	1	77	1
1	2.9	2.9	0	0	1	1	.	2	2	.	.	1	77	1
1	3.0	3.0	0	0	1	1	.	2	2	.	.	1	77	1
1	3.1	3.1	0	0	1	1	.	2	2	.	.	1	77	1
1	3.2	3.2	0	0	1	1	.	2	2	.	.	1	77	1
1	3.3	3.3	0	0	1	1	.	2	2	.	.	1	77	1
1	3.4	3.4	0	0	1	1	.	2	2	.	.	1	77	1
1	3.5	3.5	0	0	1	1	.	2	2	.	.	1	77	1
1	3.6	3.6	0	0	1	1	.	2	2	.	.	1	77	1
1	3.7	3.7	0	0	1	1	.	2	2	.	.	1	77	1
1	3.8	3.8	0	0	1	1	.	2	2	.	.	1	77	1
1	3.9	3.9	0	0	1	1	.	2	2	.	.	1	77	1
1	4.0	4.0	0	0	0	1	.	2	0	7.6	2	0	77	1
1	4.1	4.1	0	0	1	1	.	2	2	.	.	1	77	1
1	4.2	4.2	0	0	1	1	.	2	2	.	.	1	77	1
1	4.3	4.3	0	0	1	1	.	2	2	.	.	1	77	1
1	4.4	4.4	0	0	1	1	.	2	2	.	.	1	77	1
1	4.5	4.5	0	0	1	1	.	2	2	.	.	1	77	1
1	4.6	4.6	0	0	1	1	.	2	2	.	.	1	77	1
1	4.7	4.7	0	0	1	1	.	2	2	.	.	1	77	1
1	4.8	4.8	0	0	1	1	.	2	2	.	.	1	77	1
1	4.9	4.9	0	0	1	1	.	2	2	.	.	1	77	1
1	5.0	5.0	0	0	1	1	.	2	2	.	.	1	77	1
1	5.1	5.1	0	0	1	1	.	2	2	.	.	1	77	1
1	5.2	5.2	0	0	1	1	.	2	2	.	.	1	77	1
1	5.3	5.3	0	0	1	1	.	2	2	.	.	1	77	1
1	5.4	5.4	0	0	1	1	.	2	2	.	.	1	77	1
1	5.5	5.5	0	0	1	1	.	2	2	.	.	1	77	1
1	5.6	5.6	0	0	1	1	.	2	2	.	.	1	77	1
1	5.7	5.7	0	0	1	1	.	2	2	.	.	1	77	1
1	5.8	5.8	0	0	1	1	.	2	2	.	.	1	77	1
1	5.9	5.9	0	0	1	1	.	2	2	.	.	1	77	1
1	6.0	6.0	0	0	1	1	.	2	2	.	.	1	77	1
1	6.1	6.1	0	0	1	1	.	2	2	.	.	1	77	1
1	6.2	6.2	0	0	1	1	.	2	2	.	.	1	77	1
1	6.3	6.3	0	0	1	1	.	2	2	.	.	1	77	1
1	6.4	6.4	0	0	1	1	.	2	2	.	.	1	77	1
1	6.5	6.5	0	0	1	1	.	2	2	.	.	1	77	1
1	6.6	6.6	0	0	1	1	.	2	2	.	.	1	77	1
1	6.7	6.7	0	0	1	1	.	2	2	.	.	1	77	1
1	6.8	6.8	0	0	1	1	.	2	2	.	.	1	77	1
1	6.9	6.9	0	0	1	1	.	2	2	.	.	1	77	1
1	7.0	7.0	0	0	1	1	.	2	2	.	.	1	77	1
1	7.1	7.1	0	0	1	1	.	2	2	.	.	1	77	1
1	7.2	7.2	0	0	1	1	.	2	2	.	.	1	77	1
1	7.3	7.3	0	0	1	1	.	2	2	.	.	1	77	1
1	7.4	7.4	0	0	1	1	.	2	2	.	.	1	77	1
1	7.5	7.5	0	0	1	1	.	2	2	.	.	1	77	1
1	7.6	7.6	0	0	1	1	.	2	2	.	.	1	77	1
1	7.7	7.7	0	0	1	1	.	2	2	.	.	1	77	1
1	7.8	7.8	0	0	1	1	.	2	2	.	.	1	77	1

1	7.9	7.9	0	0	1	1	.	2	2	.	.	1	77	1
1	8.0	8.0	0	0	1	1	.	2	2	.	.	1	77	1
1	8.1	8.1	0	0	1	1	.	2	2	.	.	1	77	1
1	8.2	8.2	0	0	1	1	.	2	2	.	.	1	77	1
1	8.3	8.3	0	0	1	1	.	2	2	.	.	1	77	1
1	8.4	8.4	0	0	1	1	.	2	2	.	.	1	77	1
1	8.5	8.5	0	0	1	1	.	2	2	.	.	1	77	1
1	8.6	8.6	0	0	1	1	.	2	2	.	.	1	77	1
1	8.7	8.7	0	0	1	1	.	2	2	.	.	1	77	1
1	8.8	8.8	0	0	1	1	.	2	2	.	.	1	77	1
1	8.9	8.9	0	0	1	1	.	2	2	.	.	1	77	1
1	9.0	9.0	0	0	1	1	.	2	2	.	.	1	77	1
1	9.1	9.1	0	0	1	1	.	2	2	.	.	1	77	1
1	9.2	9.2	0	0	1	1	.	2	2	.	.	1	77	1
1	9.3	9.3	0	0	1	1	.	2	2	.	.	1	77	1
1	9.4	9.4	0	0	1	1	.	2	2	.	.	1	77	1
1	9.5	9.5	0	0	1	1	.	2	2	.	.	1	77	1
1	9.6	9.6	0	0	1	1	.	2	2	.	.	1	77	1
1	9.7	9.7	0	0	1	1	.	2	2	.	.	1	77	1
1	9.8	9.8	0	0	1	1	.	2	2	.	.	1	77	1
1	9.9	9.9	0	0	1	1	.	2	2	.	.	1	77	1
1	10.0	10.0	0	0	1	1	.	2	2	.	.	1	77	1
1	10.1	10.1	0	0	1	1	.	2	2	.	.	1	77	1
1	10.2	10.2	0	0	1	1	.	2	2	.	.	1	77	1
1	10.3	10.3	0	0	1	1	.	2	2	.	.	1	77	1
1	10.4	10.4	0	0	1	1	.	2	2	.	.	1	77	1
1	10.5	10.5	0	0	1	1	.	2	2	.	.	1	77	1
1	10.6	10.6	0	0	1	1	.	2	2	.	.	1	77	1
1	10.7	10.7	0	0	1	1	.	2	2	.	.	1	77	1
1	10.8	10.8	0	0	1	1	.	2	2	.	.	1	77	1
1	10.9	10.9	0	0	1	1	.	2	2	.	.	1	77	1
1	11.0	11.0	0	0	1	1	.	2	2	.	.	1	77	1
1	11.1	11.1	0	0	1	1	.	2	2	.	.	1	77	1
1	11.2	11.2	0	0	1	1	.	2	2	.	.	1	77	1
1	11.3	11.3	0	0	1	1	.	2	2	.	.	1	77	1
1	11.4	11.4	0	0	1	1	.	2	2	.	.	1	77	1
1	11.5	11.5	0	0	1	1	.	2	2	.	.	1	77	1
1	11.6	11.6	0	0	1	1	.	2	2	.	.	1	77	1
1	11.7	11.7	0	0	1	1	.	2	2	.	.	1	77	1
1	11.8	11.8	0	0	1	1	.	2	2	.	.	1	77	1
1	11.9	11.9	0	0	1	1	.	2	2	.	.	1	77	1
1	12.0	12.0	0	0	0	1	.	2	0	2.3	0.8	0	77	1
1	12.1	12.1	0	0	1	1	.	2	2	.	.	1	77	1
1	12.2	12.2	0	0	1	1	.	2	2	.	.	1	77	1
1	12.3	12.3	0	0	1	1	.	2	2	.	.	1	77	1
1	12.4	12.4	0	0	1	1	.	2	2	.	.	1	77	1
1	12.5	12.5	0	0	1	1	.	2	2	.	.	1	77	1
1	12.6	12.6	0	0	1	1	.	2	2	.	.	1	77	1
1	12.7	12.7	0	0	1	1	.	2	2	.	.	1	77	1
1	12.8	12.8	0	0	1	1	.	2	2	.	.	1	77	1
1	12.9	12.9	0	0	1	1	.	2	2	.	.	1	77	1
1	13.0	13.0	0	0	1	1	.	2	2	.	.	1	77	1
1	13.1	13.1	0	0	1	1	.	2	2	.	.	1	77	1
1	13.2	13.2	0	0	1	1	.	2	2	.	.	1	77	1

1	13.3	13.3	0	0	1	1	.	2	2	.	.	1	77	1
1	13.4	13.4	0	0	1	1	.	2	2	.	.	1	77	1
1	13.5	13.5	0	0	1	1	.	2	2	.	.	1	77	1
1	13.6	13.6	0	0	1	1	.	2	2	.	.	1	77	1
1	13.7	13.7	0	0	1	1	.	2	2	.	.	1	77	1
1	13.8	13.8	0	0	1	1	.	2	2	.	.	1	77	1
1	13.9	13.9	0	0	1	1	.	2	2	.	.	1	77	1
1	14.0	14.0	0	0	1	1	.	2	2	.	.	1	77	1
1	14.1	14.1	0	0	1	1	.	2	2	.	.	1	77	1
1	14.2	14.2	0	0	1	1	.	2	2	.	.	1	77	1
1	14.3	14.3	0	0	1	1	.	2	2	.	.	1	77	1
1	14.4	14.4	0	0	1	1	.	2	2	.	.	1	77	1
1	14.5	14.5	0	0	1	1	.	2	2	.	.	1	77	1
1	14.6	14.6	0	0	1	1	.	2	2	.	.	1	77	1
1	14.7	14.7	0	0	1	1	.	2	2	.	.	1	77	1
1	14.8	14.8	0	0	1	1	.	2	2	.	.	1	77	1
1	14.9	14.9	0	0	1	1	.	2	2	.	.	1	77	1
1	15.0	15.0	0	0	1	1	.	2	2	.	.	1	77	1
1	15.1	15.1	0	0	1	1	.	2	2	.	.	1	77	1
1	15.2	15.2	0	0	1	1	.	2	2	.	.	1	77	1
1	15.3	15.3	0	0	1	1	.	2	2	.	.	1	77	1
1	15.4	15.4	0	0	1	1	.	2	2	.	.	1	77	1
1	15.5	15.5	0	0	1	1	.	2	2	.	.	1	77	1
1	15.6	15.6	0	0	1	1	.	2	2	.	.	1	77	1
1	15.7	15.7	0	0	1	1	.	2	2	.	.	1	77	1
1	15.8	15.8	0	0	1	1	.	2	2	.	.	1	77	1
1	15.9	15.9	0	0	1	1	.	2	2	.	.	1	77	1
1	16.0	16.0	0	0	1	1	.	2	2	.	.	1	77	1
1	16.1	16.1	0	0	1	1	.	2	2	.	.	1	77	1
1	16.2	16.2	0	0	1	1	.	2	2	.	.	1	77	1
1	16.3	16.3	0	0	1	1	.	2	2	.	.	1	77	1
1	16.4	16.4	0	0	1	1	.	2	2	.	.	1	77	1
1	16.5	16.5	0	0	1	1	.	2	2	.	.	1	77	1
1	16.6	16.6	0	0	1	1	.	2	2	.	.	1	77	1
1	16.7	16.7	0	0	1	1	.	2	2	.	.	1	77	1
1	16.8	16.8	0	0	1	1	.	2	2	.	.	1	77	1
1	16.9	16.9	0	0	1	1	.	2	2	.	.	1	77	1
1	17.0	17.0	0	0	1	1	.	2	2	.	.	1	77	1
1	17.1	17.1	0	0	1	1	.	2	2	.	.	1	77	1
1	17.2	17.2	0	0	1	1	.	2	2	.	.	1	77	1
1	17.3	17.3	0	0	1	1	.	2	2	.	.	1	77	1
1	17.4	17.4	0	0	1	1	.	2	2	.	.	1	77	1
1	17.5	17.5	0	0	1	1	.	2	2	.	.	1	77	1
1	17.6	17.6	0	0	1	1	.	2	2	.	.	1	77	1
1	17.7	17.7	0	0	1	1	.	2	2	.	.	1	77	1
1	17.8	17.8	0	0	1	1	.	2	2	.	.	1	77	1
1	17.9	17.9	0	0	1	1	.	2	2	.	.	1	77	1
1	18.0	18.0	0	0	1	1	.	2	2	.	.	1	77	1
1	18.1	18.1	0	0	1	1	.	2	2	.	.	1	77	1
1	18.2	18.2	0	0	1	1	.	2	2	.	.	1	77	1
1	18.3	18.3	0	0	1	1	.	2	2	.	.	1	77	1
1	18.4	18.4	0	0	1	1	.	2	2	.	.	1	77	1
1	18.5	18.5	0	0	1	1	.	2	2	.	.	1	77	1
1	18.6	18.6	0	0	1	1	.	2	2	.	.	1	77	1

1	18.7	18.7	0	0	1	1	.	2	2	.	.	1	77	1
1	18.8	18.8	0	0	1	1	.	2	2	.	.	1	77	1
1	18.9	18.9	0	0	1	1	.	2	2	.	.	1	77	1
1	19.0	19.0	0	0	1	1	.	2	2	.	.	1	77	1
1	19.1	19.1	0	0	1	1	.	2	2	.	.	1	77	1
1	19.2	19.2	0	0	1	1	.	2	2	.	.	1	77	1
1	19.3	19.3	0	0	1	1	.	2	2	.	.	1	77	1
1	19.4	19.4	0	0	1	1	.	2	2	.	.	1	77	1
1	19.5	19.5	0	0	1	1	.	2	2	.	.	1	77	1
1	19.6	19.6	0	0	1	1	.	2	2	.	.	1	77	1
1	19.7	19.7	0	0	1	1	.	2	2	.	.	1	77	1
1	19.8	19.8	0	0	1	1	.	2	2	.	.	1	77	1
1	19.9	19.9	0	0	1	1	.	2	2	.	.	1	77	1
1	20.0	20.0	0	0	1	1	.	2	2	.	.	1	77	1
1	20.1	20.1	0	0	1	1	.	2	2	.	.	1	77	1
1	20.2	20.2	0	0	1	1	.	2	2	.	.	1	77	1
1	20.3	20.3	0	0	1	1	.	2	2	.	.	1	77	1
1	20.4	20.4	0	0	1	1	.	2	2	.	.	1	77	1
1	20.5	20.5	0	0	1	1	.	2	2	.	.	1	77	1
1	20.6	20.6	0	0	1	1	.	2	2	.	.	1	77	1
1	20.7	20.7	0	0	1	1	.	2	2	.	.	1	77	1
1	20.8	20.8	0	0	1	1	.	2	2	.	.	1	77	1
1	20.9	20.9	0	0	1	1	.	2	2	.	.	1	77	1
1	21.0	21.0	0	0	1	1	.	2	2	.	.	1	77	1
1	21.1	21.1	0	0	1	1	.	2	2	.	.	1	77	1
1	21.2	21.2	0	0	1	1	.	2	2	.	.	1	77	1
1	21.3	21.3	0	0	1	1	.	2	2	.	.	1	77	1
1	21.4	21.4	0	0	1	1	.	2	2	.	.	1	77	1
1	21.5	21.5	0	0	1	1	.	2	2	.	.	1	77	1
1	21.6	21.6	0	0	1	1	.	2	2	.	.	1	77	1
1	21.7	21.7	0	0	1	1	.	2	2	.	.	1	77	1
1	21.8	21.8	0	0	1	1	.	2	2	.	.	1	77	1
1	21.9	21.9	0	0	1	1	.	2	2	.	.	1	77	1
1	22.0	22.0	0	0	1	1	.	2	2	.	.	1	77	1
1	22.1	22.1	0	0	1	1	.	2	2	.	.	1	77	1
1	22.2	22.2	0	0	1	1	.	2	2	.	.	1	77	1
1	22.3	22.3	0	0	1	1	.	2	2	.	.	1	77	1
1	22.4	22.4	0	0	1	1	.	2	2	.	.	1	77	1
1	22.5	22.5	0	0	1	1	.	2	2	.	.	1	77	1
1	22.6	22.6	0	0	1	1	.	2	2	.	.	1	77	1
1	22.7	22.7	0	0	1	1	.	2	2	.	.	1	77	1
1	22.8	22.8	0	0	1	1	.	2	2	.	.	1	77	1
1	22.9	22.9	0	0	1	1	.	2	2	.	.	1	77	1
1	23.0	23.0	0	0	1	1	.	2	2	.	.	1	77	1
1	23.1	23.1	0	0	1	1	.	2	2	.	.	1	77	1
1	23.2	23.2	0	0	1	1	.	2	2	.	.	1	77	1
1	23.3	23.3	0	0	1	1	.	2	2	.	.	1	77	1
1	23.4	23.4	0	0	1	1	.	2	2	.	.	1	77	1
1	23.5	23.5	0	0	1	1	.	2	2	.	.	1	77	1
1	23.6	23.6	0	0	1	1	.	2	2	.	.	1	77	1
1	23.7	23.7	0	0	1	1	.	2	2	.	.	1	77	1
1	23.8	23.8	0	0	1	1	.	2	2	.	.	1	77	1
1	23.9	23.9	0	0	1	1	.	2	2	.	.	1	77	1
1	24.0	0.0	24	0	0	2	200	1	1	.	.	1	77	1

1	24.0	0.0	24	24	0	2	.	2	0	0	.	0	77	1
1	24.1	0.1	24	24	1	2	.	2	2	.	.	1	77	1
1	24.2	0.2	24	24	1	2	.	2	2	.	.	1	77	1
1	24.3	0.3	24	24	1	2	.	2	2	.	.	1	77	1
1	24.4	0.4	24	24	1	2	.	2	2	.	.	1	77	1
1	24.5	0.5	24	24	1	2	.	2	2	.	.	1	77	1
1	24.6	0.6	24	24	1	2	.	2	2	.	.	1	77	1
1	24.7	0.7	24	24	1	2	.	2	2	.	.	1	77	1
1	24.8	0.8	24	24	1	2	.	2	2	.	.	1	77	1
1	24.9	0.9	24	24	1	2	.	2	2	.	.	1	77	1
1	25.0	1.0	24	24	0	2	.	2	0	24.2	3.2	0	77	1
1	25.1	1.1	24	24	1	2	.	2	2	.	.	1	77	1
1	25.2	1.2	24	24	1	2	.	2	2	.	.	1	77	1
1	25.3	1.3	24	24	1	2	.	2	2	.	.	1	77	1
1	25.4	1.4	24	24	1	2	.	2	2	.	.	1	77	1
1	25.5	1.5	24	24	1	2	.	2	2	.	.	1	77	1
1	25.6	1.6	24	24	1	2	.	2	2	.	.	1	77	1
1	25.7	1.7	24	24	1	2	.	2	2	.	.	1	77	1
1	25.8	1.8	24	24	1	2	.	2	2	.	.	1	77	1
1	25.9	1.9	24	24	1	2	.	2	2	.	.	1	77	1
1	26.0	2.0	24	24	1	2	.	2	2	.	.	1	77	1
2	0.0	0.0	0	0	0	1	100	1	1	.	.	1	82	0
2	0.0	0.0	0	0	0	1	.	2	0	0	.	0	82	0
2	0.9	0.9	0	0	0	1	.	2	0	7.3	2	0	82	0
2	1.0	1.0	0	0	1	1	.	2	2	.	.	1	82	0
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2	1.3	1.3	0	0	1	1	.	2	2	.	.	1	82	0
2	1.4	1.4	0	0	1	1	.	2	2	.	.	1	82	0
2	1.5	1.5	0	0	1	1	.	2	2	.	.	1	82	0
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2	1.7	1.7	0	0	1	1	.	2	2	.	.	1	82	0
2	1.8	1.8	0	0	1	1	.	2	2	.	.	1	82	0
2	1.9	1.9	0	0	1	1	.	2	2	.	.	1	82	0
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2	2.1	2.1	0	0	1	1	.	2	2	.	.	1	82	0
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2	2.3	2.3	0	0	1	1	.	2	2	.	.	1	82	0
2	2.4	2.4	0	0	1	1	.	2	2	.	.	1	82	0
2	2.5	2.5	0	0	1	1	.	2	2	.	.	1	82	0
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2	2.8	2.8	0	0	1	1	.	2	2	.	.	1	82	0
2	2.9	2.9	0	0	1	1	.	2	2	.	.	1	82	0
2	3.0	3.0	0	0	1	1	.	2	2	.	.	1	82	0
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2	3.3	3.3	0	0	1	1	.	2	2	.	.	1	82	0
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2	3.7	3.7	0	0	1	1	.	2	2	.	.	1	82	0
2	3.8	3.8	0	0	0	1	.	2	0	4	1.4	0	82	0
2	3.8	3.8	0	0	1	1	.	2	2	.	.	1	82	0

2	3.9	3.9	0	0	1	1	.	2	2	.	.	1	82	0
2	4.0	4.0	0	0	1	1	.	2	2	.	.	1	82	0
2	4.1	4.1	0	0	1	1	.	2	2	.	.	1	82	0
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2	4.4	4.4	0	0	1	1	.	2	2	.	.	1	82	0
2	4.5	4.5	0	0	1	1	.	2	2	.	.	1	82	0
2	4.6	4.6	0	0	1	1	.	2	2	.	.	1	82	0
2	4.7	4.7	0	0	1	1	.	2	2	.	.	1	82	0
2	4.8	4.8	0	0	1	1	.	2	2	.	.	1	82	0
2	4.9	4.9	0	0	1	1	.	2	2	.	.	1	82	0
2	5.0	5.0	0	0	1	1	.	2	2	.	.	1	82	0
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2	5.7	5.7	0	0	1	1	.	2	2	.	.	1	82	0
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2	5.9	5.9	0	0	1	1	.	2	2	.	.	1	82	0
2	6.0	6.0	0	0	1	1	.	2	2	.	.	1	82	0
2	6.1	6.1	0	0	1	1	.	2	2	.	.	1	82	0
2	6.2	6.2	0	0	1	1	.	2	2	.	.	1	82	0
2	6.3	6.3	0	0	1	1	.	2	2	.	.	1	82	0
2	6.4	6.4	0	0	1	1	.	2	2	.	.	1	82	0
2	6.5	6.5	0	0	1	1	.	2	2	.	.	1	82	0
2	6.6	6.6	0	0	1	1	.	2	2	.	.	1	82	0
2	6.7	6.7	0	0	1	1	.	2	2	.	.	1	82	0
2	6.8	6.8	0	0	1	1	.	2	2	.	.	1	82	0
2	6.9	6.9	0	0	1	1	.	2	2	.	.	1	82	0
2	7.0	7.0	0	0	1	1	.	2	2	.	.	1	82	0
2	7.1	7.1	0	0	1	1	.	2	2	.	.	1	82	0
2	7.2	7.2	0	0	1	1	.	2	2	.	.	1	82	0
2	7.3	7.3	0	0	1	1	.	2	2	.	.	1	82	0
2	7.4	7.4	0	0	1	1	.	2	2	.	.	1	82	0
2	7.5	7.5	0	0	1	1	.	2	2	.	.	1	82	0
2	7.6	7.6	0	0	1	1	.	2	2	.	.	1	82	0
2	7.7	7.7	0	0	1	1	.	2	2	.	.	1	82	0
2	7.8	7.8	0	0	1	1	.	2	2	.	.	1	82	0
2	7.9	7.9	0	0	1	1	.	2	2	.	.	1	82	0
2	8.0	8.0	0	0	1	1	.	2	2	.	.	1	82	0
2	8.1	8.1	0	0	1	1	.	2	2	.	.	1	82	0
2	8.2	8.2	0	0	1	1	.	2	2	.	.	1	82	0
2	8.3	8.3	0	0	1	1	.	2	2	.	.	1	82	0
2	8.4	8.4	0	0	1	1	.	2	2	.	.	1	82	0
2	8.5	8.5	0	0	1	1	.	2	2	.	.	1	82	0
2	8.6	8.6	0	0	1	1	.	2	2	.	.	1	82	0
2	8.7	8.7	0	0	1	1	.	2	2	.	.	1	82	0
2	8.8	8.8	0	0	1	1	.	2	2	.	.	1	82	0
2	8.9	8.9	0	0	1	1	.	2	2	.	.	1	82	0
2	9.0	9.0	0	0	1	1	.	2	2	.	.	1	82	0
2	9.1	9.1	0	0	1	1	.	2	2	.	.	1	82	0
2	9.2	9.2	0	0	1	1	.	2	2	.	.	1	82	0

2	9.3	9.3	0	0	1	1	.	2	2	.	.	1	82	0
2	9.4	9.4	0	0	1	1	.	2	2	.	.	1	82	0
2	9.5	9.5	0	0	1	1	.	2	2	.	.	1	82	0
2	9.6	9.6	0	0	1	1	.	2	2	.	.	1	82	0
2	9.7	9.7	0	0	1	1	.	2	2	.	.	1	82	0
2	9.8	9.8	0	0	1	1	.	2	2	.	.	1	82	0
2	9.9	9.9	0	0	1	1	.	2	2	.	.	1	82	0
2	10.0	10.0	0	0	1	1	.	2	2	.	.	1	82	0
2	10.1	10.1	0	0	1	1	.	2	2	.	.	1	82	0
2	10.2	10.2	0	0	1	1	.	2	2	.	.	1	82	0
2	10.3	10.3	0	0	1	1	.	2	2	.	.	1	82	0
2	10.4	10.4	0	0	1	1	.	2	2	.	.	1	82	0
2	10.5	10.5	0	0	1	1	.	2	2	.	.	1	82	0
2	10.6	10.6	0	0	1	1	.	2	2	.	.	1	82	0
2	10.7	10.7	0	0	1	1	.	2	2	.	.	1	82	0
2	10.8	10.8	0	0	1	1	.	2	2	.	.	1	82	0
2	10.9	10.9	0	0	1	1	.	2	2	.	.	1	82	0
2	11.0	11.0	0	0	1	1	.	2	2	.	.	1	82	0
2	11.1	11.1	0	0	1	1	.	2	2	.	.	1	82	0
2	11.2	11.2	0	0	1	1	.	2	2	.	.	1	82	0
2	11.3	11.3	0	0	1	1	.	2	2	.	.	1	82	0
2	11.4	11.4	0	0	1	1	.	2	2	.	.	1	82	0
2	11.5	11.5	0	0	1	1	.	2	2	.	.	1	82	0
2	11.6	11.6	0	0	1	1	.	2	2	.	.	1	82	0
2	11.7	11.7	0	0	1	1	.	2	2	.	.	1	82	0
2	11.8	11.8	0	0	1	1	.	2	2	.	.	1	82	0
2	11.9	11.9	0	0	1	1	.	2	2	.	.	1	82	0
2	12.0	12.0	0	0	1	1	.	2	2	.	.	1	82	0
2	12.1	12.1	0	0	1	1	.	2	2	.	.	1	82	0
2	12.2	12.2	0	0	0	1	.	2	0	1.1	0.1	0	82	0
2	12.2	12.2	0	0	1	1	.	2	2	.	.	1	82	0
2	12.3	12.3	0	0	1	1	.	2	2	.	.	1	82	0
2	12.4	12.4	0	0	1	1	.	2	2	.	.	1	82	0
2	12.5	12.5	0	0	1	1	.	2	2	.	.	1	82	0
2	12.6	12.6	0	0	1	1	.	2	2	.	.	1	82	0
2	12.7	12.7	0	0	1	1	.	2	2	.	.	1	82	0
2	12.8	12.8	0	0	1	1	.	2	2	.	.	1	82	0
2	12.9	12.9	0	0	1	1	.	2	2	.	.	1	82	0
2	13.0	13.0	0	0	1	1	.	2	2	.	.	1	82	0
2	13.1	13.1	0	0	1	1	.	2	2	.	.	1	82	0
2	13.2	13.2	0	0	1	1	.	2	2	.	.	1	82	0
2	13.3	13.3	0	0	1	1	.	2	2	.	.	1	82	0
2	13.4	13.4	0	0	1	1	.	2	2	.	.	1	82	0
2	13.5	13.5	0	0	1	1	.	2	2	.	.	1	82	0
2	13.6	13.6	0	0	1	1	.	2	2	.	.	1	82	0
2	13.7	13.7	0	0	1	1	.	2	2	.	.	1	82	0
2	13.8	13.8	0	0	1	1	.	2	2	.	.	1	82	0
2	13.9	13.9	0	0	1	1	.	2	2	.	.	1	82	0
2	14.0	14.0	0	0	1	1	.	2	2	.	.	1	82	0
2	14.1	14.1	0	0	1	1	.	2	2	.	.	1	82	0
2	14.2	14.2	0	0	1	1	.	2	2	.	.	1	82	0
2	14.3	14.3	0	0	1	1	.	2	2	.	.	1	82	0
2	14.4	14.4	0	0	1	1	.	2	2	.	.	1	82	0
2	14.5	14.5	0	0	1	1	.	2	2	.	.	1	82	0

2	14.6	14.6	0	0	1	1	.	2	2	.	.	1	82	0
2	14.7	14.7	0	0	1	1	.	2	2	.	.	1	82	0
2	14.8	14.8	0	0	1	1	.	2	2	.	.	1	82	0
2	14.9	14.9	0	0	1	1	.	2	2	.	.	1	82	0
2	15.0	15.0	0	0	1	1	.	2	2	.	.	1	82	0
2	15.1	15.1	0	0	1	1	.	2	2	.	.	1	82	0
2	15.2	15.2	0	0	1	1	.	2	2	.	.	1	82	0
2	15.3	15.3	0	0	1	1	.	2	2	.	.	1	82	0
2	15.4	15.4	0	0	1	1	.	2	2	.	.	1	82	0
2	15.5	15.5	0	0	1	1	.	2	2	.	.	1	82	0
2	15.6	15.6	0	0	1	1	.	2	2	.	.	1	82	0
2	15.7	15.7	0	0	1	1	.	2	2	.	.	1	82	0
2	15.8	15.8	0	0	1	1	.	2	2	.	.	1	82	0
2	15.9	15.9	0	0	1	1	.	2	2	.	.	1	82	0
2	16.0	16.0	0	0	1	1	.	2	2	.	.	1	82	0
2	16.1	16.1	0	0	1	1	.	2	2	.	.	1	82	0
2	16.2	16.2	0	0	1	1	.	2	2	.	.	1	82	0
2	16.3	16.3	0	0	1	1	.	2	2	.	.	1	82	0
2	16.4	16.4	0	0	1	1	.	2	2	.	.	1	82	0
2	16.5	16.5	0	0	1	1	.	2	2	.	.	1	82	0
2	16.6	16.6	0	0	1	1	.	2	2	.	.	1	82	0
2	16.7	16.7	0	0	1	1	.	2	2	.	.	1	82	0
2	16.8	16.8	0	0	1	1	.	2	2	.	.	1	82	0
2	16.9	16.9	0	0	1	1	.	2	2	.	.	1	82	0
2	17.0	17.0	0	0	1	1	.	2	2	.	.	1	82	0
2	17.1	17.1	0	0	1	1	.	2	2	.	.	1	82	0
2	17.2	17.2	0	0	1	1	.	2	2	.	.	1	82	0
2	17.3	17.3	0	0	1	1	.	2	2	.	.	1	82	0
2	17.4	17.4	0	0	1	1	.	2	2	.	.	1	82	0
2	17.5	17.5	0	0	1	1	.	2	2	.	.	1	82	0
2	17.6	17.6	0	0	1	1	.	2	2	.	.	1	82	0
2	17.7	17.7	0	0	1	1	.	2	2	.	.	1	82	0
2	17.8	17.8	0	0	1	1	.	2	2	.	.	1	82	0
2	17.9	17.9	0	0	1	1	.	2	2	.	.	1	82	0
2	18.0	18.0	0	0	1	1	.	2	2	.	.	1	82	0
2	18.1	18.1	0	0	1	1	.	2	2	.	.	1	82	0
2	18.2	18.2	0	0	1	1	.	2	2	.	.	1	82	0
2	18.3	18.3	0	0	1	1	.	2	2	.	.	1	82	0
2	18.4	18.4	0	0	1	1	.	2	2	.	.	1	82	0
2	18.5	18.5	0	0	1	1	.	2	2	.	.	1	82	0
2	18.6	18.6	0	0	1	1	.	2	2	.	.	1	82	0
2	18.7	18.7	0	0	1	1	.	2	2	.	.	1	82	0
2	18.8	18.8	0	0	1	1	.	2	2	.	.	1	82	0
2	18.9	18.9	0	0	1	1	.	2	2	.	.	1	82	0
2	19.0	19.0	0	0	1	1	.	2	2	.	.	1	82	0
2	19.1	19.1	0	0	1	1	.	2	2	.	.	1	82	0
2	19.2	19.2	0	0	1	1	.	2	2	.	.	1	82	0
2	19.3	19.3	0	0	1	1	.	2	2	.	.	1	82	0
2	19.4	19.4	0	0	1	1	.	2	2	.	.	1	82	0
2	19.5	19.5	0	0	1	1	.	2	2	.	.	1	82	0
2	19.6	19.6	0	0	1	1	.	2	2	.	.	1	82	0
2	19.7	19.7	0	0	1	1	.	2	2	.	.	1	82	0
2	19.8	19.8	0	0	1	1	.	2	2	.	.	1	82	0
2	19.9	19.9	0	0	1	1	.	2	2	.	.	1	82	0

2	20.0	20.0	0	0	1	1	.	2	2	.	.	1	82	0
2	20.1	20.1	0	0	1	1	.	2	2	.	.	1	82	0
2	20.2	20.2	0	0	1	1	.	2	2	.	.	1	82	0
2	20.3	20.3	0	0	1	1	.	2	2	.	.	1	82	0
2	20.4	20.4	0	0	1	1	.	2	2	.	.	1	82	0
2	20.5	20.5	0	0	1	1	.	2	2	.	.	1	82	0
2	20.6	20.6	0	0	1	1	.	2	2	.	.	1	82	0
2	20.7	20.7	0	0	1	1	.	2	2	.	.	1	82	0
2	20.8	20.8	0	0	1	1	.	2	2	.	.	1	82	0
2	20.9	20.9	0	0	1	1	.	2	2	.	.	1	82	0
2	21.0	21.0	0	0	1	1	.	2	2	.	.	1	82	0
2	21.1	21.1	0	0	1	1	.	2	2	.	.	1	82	0
2	21.2	21.2	0	0	1	1	.	2	2	.	.	1	82	0
2	21.3	21.3	0	0	1	1	.	2	2	.	.	1	82	0
2	21.4	21.4	0	0	1	1	.	2	2	.	.	1	82	0
2	21.5	21.5	0	0	1	1	.	2	2	.	.	1	82	0
2	21.6	21.6	0	0	1	1	.	2	2	.	.	1	82	0
2	21.7	21.7	0	0	1	1	.	2	2	.	.	1	82	0
2	21.8	21.8	0	0	1	1	.	2	2	.	.	1	82	0
2	21.9	21.9	0	0	1	1	.	2	2	.	.	1	82	0
2	22.0	22.0	0	0	1	1	.	2	2	.	.	1	82	0
2	22.1	22.1	0	0	1	1	.	2	2	.	.	1	82	0
2	22.2	22.2	0	0	1	1	.	2	2	.	.	1	82	0
2	22.3	22.3	0	0	1	1	.	2	2	.	.	1	82	0
2	22.4	22.4	0	0	1	1	.	2	2	.	.	1	82	0
2	22.5	22.5	0	0	1	1	.	2	2	.	.	1	82	0
2	22.6	22.6	0	0	1	1	.	2	2	.	.	1	82	0
2	22.7	22.7	0	0	1	1	.	2	2	.	.	1	82	0
2	22.8	22.8	0	0	1	1	.	2	2	.	.	1	82	0
2	22.9	22.9	0	0	1	1	.	2	2	.	.	1	82	0
2	23.0	23.0	0	0	1	1	.	2	2	.	.	1	82	0
2	23.1	23.1	0	0	1	1	.	2	2	.	.	1	82	0
2	23.2	23.2	0	0	1	1	.	2	2	.	.	1	82	0
2	23.3	23.3	0	0	1	1	.	2	2	.	.	1	82	0
2	23.4	23.4	0	0	1	1	.	2	2	.	.	1	82	0
2	23.5	23.5	0	0	1	1	.	2	2	.	.	1	82	0
2	23.6	23.6	0	0	1	1	.	2	2	.	.	1	82	0
2	23.7	23.7	0	0	1	1	.	2	2	.	.	1	82	0
2	23.8	23.8	0	0	1	1	.	2	2	.	.	1	82	0
2	23.9	23.9	0	0	1	1	.	2	2	.	.	1	82	0
2	24.0	0.0	24	0	0	2	200	1	1	.	.	1	82	0
2	24.0	0.0	24	24	0	2	.	2	0	0	.	0	82	0
2	24.1	0.1	24	24	1	2	.	2	2	.	.	1	82	0
2	24.2	0.2	24	24	1	2	.	2	2	.	.	1	82	0
2	24.3	0.3	24	24	1	2	.	2	2	.	.	1	82	0
2	24.4	0.4	24	24	1	2	.	2	2	.	.	1	82	0
2	24.5	0.5	24	24	1	2	.	2	2	.	.	1	82	0
2	24.6	0.6	24	24	1	2	.	2	2	.	.	1	82	0
2	24.7	0.7	24	24	1	2	.	2	2	.	.	1	82	0
2	24.8	0.8	24	24	1	2	.	2	2	.	.	1	82	0
2	24.9	0.9	24	24	1	2	.	2	2	.	.	1	82	0
2	25.0	1.0	24	24	1	2	.	2	2	.	.	1	82	0
2	25.1	1.1	24	24	0	2	.	2	0	14.1	2.6	0	82	0
2	25.2	1.2	24	24	1	2	.	2	2	.	.	1	82	0

2	25.3	1.3	24	24	1	2	.	2	2	.	.	1	82	0
2	25.4	1.4	24	24	1	2	.	2	2	.	.	1	82	0
2	25.5	1.5	24	24	1	2	.	2	2	.	.	1	82	0
2	25.6	1.6	24	24	1	2	.	2	2	.	.	1	82	0
2	25.7	1.7	24	24	1	2	.	2	2	.	.	1	82	0
2	25.8	1.8	24	24	1	2	.	2	2	.	.	1	82	0
2	25.9	1.9	24	24	1	2	.	2	2	.	.	1	82	0
2	26.0	2.0	24	24	1	2	.	2	2	.	.	1	82	0

Example of dataset with time dependent covariates

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_start)),
          dose=as.data.frame(puzzle::df_dose_start),
          cov=as.data.frame(puzzle::df_cov_time_dependent_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(0),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov))

## Automatic coercion to numeric for CMT
## 1=parent

## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	1	0	0	.	0	77	1
	1	1.0	1.0	0	0	1	.	1	0	10.8	2.4	0	77	1
	1	4.0	4.0	0	0	1	.	1	0	7.6	2	0	78	1
	1	12.0	12.0	0	0	1	.	1	0	2.3	0.8	0	78	1
	1	24.0	0.0	24	0	2	200	1	1	.	.	1	78	1
	1	24.0	0.0	24	24	2	.	1	0	0	.	0	78	1
	1	25.0	1.0	24	24	2	.	1	0	24.2	3.2	0	78	1
	2	0.0	0.0	0	0	1	100	1	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	.	1	0	0	.	0	82	0
	2	0.9	0.9	0	0	1	.	1	0	7.3	2	0	82	0
	2	3.8	3.8	0	0	1	.	1	0	4	1.4	0	82	0
	2	12.2	12.2	0	0	1	.	1	0	1.1	0.1	0	83	0
	2	24.0	0.0	24	0	2	200	1	1	.	.	1	83	0
	2	24.0	0.0	24	24	2	.	1	0	0	.	0	83	0
	2	25.1	1.1	24	24	2	.	1	0	14.1	2.6	0	83	0

Example of dataset with parent drug and metabolite

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_parent),
      metabolite=as.data.frame(puzzle::df_pk_metabolite)),
      dose=as.data.frame(puzzle::df_dose_start),
      cov=as.data.frame(puzzle::df_cov_time_dependent_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
  order=c(1),
  pk=list(data=nm$pk),
  dose=list(data=nm$dose),
  cov=list(data=nm$cov))

## Automatic coercion to numeric for CMT
## 2=parent
## 3=metabolite

## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	2	0	0	.	0	77	1
	1	0.0	0.0	0	0	1	.	3	0	0	.	0	77	1
	1	0.5	0.5	0	0	1	.	3	0	2	0.7	0	77	1
	1	1.0	1.0	0	0	1	.	2	0	10.8	2.4	0	77	1
	1	1.0	1.0	0	0	1	.	3	0	6	1.8	0	77	1
	1	2.0	2.0	0	0	1	.	3	0	3	1.1	0	77	1
	1	4.0	4.0	0	0	1	.	2	0	7.6	2	0	78	1
	1	4.0	4.0	0	0	1	.	3	0	1	0	0	78	1
	1	12.0	12.0	0	0	1	.	2	0	2.3	0.8	0	78	1
	1	24.0	0.0	24	0	2	200	1	1	.	.	1	78	1
	1	24.0	0.0	24	24	2	.	2	0	0	.	0	78	1
	1	25.0	1.0	24	24	2	.	2	0	24.2	3.2	0	78	1
	2	0.0	0.0	0	0	1	100	1	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	.	2	0	0	.	0	82	0
	2	0.0	0.0	0	0	1	.	3	0	0	.	0	82	0
	2	0.5	0.5	0	0	1	.	3	0	3	1.1	0	82	0
	2	0.9	0.9	0	0	1	.	2	0	7.3	2	0	82	0

2	1.0	1.0	0	0	1	.	3	0	7	1.9	0	82	0
2	2.0	2.0	0	0	1	.	3	0	4	1.4	0	82	0
2	3.8	3.8	0	0	1	.	2	0	4	1.4	0	82	0
2	4.0	4.0	0	0	1	.	3	0	2	0.7	0	83	0
2	12.2	12.2	0	0	1	.	2	0	1.1	0.1	0	83	0
2	24.0	0.0	24	0	2	200	1	1	.	.	1	83	0
2	24.0	0.0	24	24	2	.	2	0	0	.	0	83	0
2	25.1	1.1	24	24	2	.	2	0	14.1	2.6	0	83	0

Example of dataset with PK and PD

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_start)),
          pd = list(response=as.data.frame(puzzle::df_pd_start)),
          dose=as.data.frame(puzzle::df_dose_start),
          cov=as.data.frame(puzzle::df_cov_time_dependent_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        pd=list(data=nm$pd),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov))
```

```
## Automatic coercion to numeric for CMT
## 2=parent
## 3=response
```

```
## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	TYPE	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	0	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	1	2	0	0	.	0	77	1
	1	0.0	0.0	0	0	1	.	2	3	0	97.8	4.6	0	77	1
	1	1.0	1.0	0	0	1	.	1	2	0	10.8	2.4	0	77	1
	1	2.0	2.0	0	0	1	.	2	3	0	147	5	0	77	1
	1	4.0	4.0	0	0	1	.	1	2	0	7.6	2	0	78	1
	1	8.0	8.0	0	0	1	.	2	3	0	99.9	4.6	0	78	1
	1	12.0	12.0	0	0	1	.	1	2	0	2.3	0.8	0	78	1
	1	24.0	0.0	24	0	2	200	0	1	1	.	.	1	78	1
	1	24.0	0.0	24	24	2	.	1	2	0	0	.	0	78	1
	1	25.0	1.0	24	24	2	.	1	2	0	24.2	3.2	0	78	1
	2	0.0	0.0	0	0	1	100	0	1	1	.	.	1	82	0
	2	0.0	0.0	0	0	1	.	1	2	0	0	.	0	82	0
	2	0.0	0.0	0	0	1	.	2	3	0	101	4.6	0	82	0
	2	0.9	0.9	0	0	1	.	1	2	0	7.3	2	0	82	0
	2	2.3	2.3	0	0	1	.	2	3	0	134	4.9	0	82	0
	2	3.8	3.8	0	0	1	.	1	2	0	4	1.4	0	82	0

2	7.8	7.8	0	0	1	.	2	3	0	98	4.6	0	83	0
2	12.2	12.2	0	0	1	.	1	2	0	1.1	0.1	0	83	0
2	24.0	0.0	24	0	2	200	0	1	1	.	.	1	83	0
2	24.0	0.0	24	24	2	.	1	2	0	0	.	0	83	0
2	25.1	1.1	24	24	2	.	1	2	0	14.1	2.6	0	83	0

Example of dataset with PK and PD with multiple entities and responses

Puzzle input

```
nm = list(pk = list(parent=as.data.frame(puzzle::df_pk_parent),
      metabolite=as.data.frame(puzzle::df_pk_metabolite)),
  pd = list(response1=as.data.frame(puzzle::df_response1),
      response2=as.data.frame(puzzle::df_response2),
      response3=as.data.frame(puzzle::df_response3)),
  dose=as.data.frame(puzzle::df_dose_start),
  cov=as.data.frame(puzzle::df_cov_time_dependent_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
  order=c(1),
  pk=list(data=nm$pk),
  pd=list(data=nm$pd),
  dose=list(data=nm$dose),
  cov=list(data=nm$cov))
```

```
## Automatic coercion to numeric for CMT
## 2=parent
## 3=metabolite
## 4=response1
## 5=response2
## 6=response3
```

```
## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	TYPE	CMT	EVID	DV	LDV	MDV	AGE	SEX
	1	0.0	0.0	0	0	1	100	0	1	1	.	.	1	77	1
	1	0.0	0.0	0	0	1	.	1	2	0	0	.	0	77	1
	1	0.0	0.0	0	0	1	.	1	3	0	0	.	0	77	1
	1	0.0	0.0	0	0	1	.	2	4	0	97.8	4.6	0	77	1
	1	0.0	0.0	0	0	1	.	2	5	0	0	.	0	77	1
	1	0.0	0.0	0	0	1	.	2	6	0	2	0.7	0	77	1
	1	0.5	0.5	0	0	1	.	1	3	0	2	0.7	0	77	1
	1	1.0	1.0	0	0	1	.	1	2	0	10.8	2.4	0	77	1
	1	1.0	1.0	0	0	1	.	1	3	0	6	1.8	0	77	1
	1	1.0	1.0	0	0	1	.	2	6	0	1	0	0	77	1

1	2.0	2.0	0	0	1	.	1	3	0	3	1.1	0	77	1
1	2.0	2.0	0	0	1	.	2	4	0	147	5	0	77	1
1	2.0	2.0	0	0	1	.	2	5	0	1	0	0	77	1
1	4.0	4.0	0	0	1	.	1	2	0	7.6	2	0	78	1
1	4.0	4.0	0	0	1	.	1	3	0	1	0	0	78	1
1	4.0	4.0	0	0	1	.	2	6	0	0	.	0	78	1
1	8.0	8.0	0	0	1	.	2	4	0	99.9	4.6	0	78	1
1	8.0	8.0	0	0	1	.	2	5	0	2	0.7	0	78	1
1	12.0	12.0	0	0	1	.	1	2	0	2.3	0.8	0	78	1
1	24.0	0.0	24	0	2	200	0	1	1	.	.	1	78	1
1	24.0	0.0	24	24	2	.	1	2	0	0	.	0	78	1
1	25.0	1.0	24	24	2	.	1	2	0	24.2	3.2	0	78	1
2	0.0	0.0	0	0	1	100	0	1	1	.	.	1	82	0
2	0.0	0.0	0	0	1	.	1	2	0	0	.	0	82	0
2	0.0	0.0	0	0	1	.	1	3	0	0	.	0	82	0
2	0.0	0.0	0	0	1	.	2	4	0	101	4.6	0	82	0
2	0.0	0.0	0	0	1	.	2	5	0	0	.	0	82	0
2	0.0	0.0	0	0	1	.	2	6	0	4	1.4	0	82	0
2	0.5	0.5	0	0	1	.	1	3	0	3	1.1	0	82	0
2	0.9	0.9	0	0	1	.	1	2	0	7.3	2	0	82	0
2	1.0	1.0	0	0	1	.	1	3	0	7	1.9	0	82	0
2	1.0	1.0	0	0	1	.	2	6	0	2	0.7	0	82	0
2	2.0	2.0	0	0	1	.	1	3	0	4	1.4	0	82	0
2	2.3	2.3	0	0	1	.	2	4	0	134	4.9	0	82	0
2	2.3	2.3	0	0	1	.	2	5	0	2	0.7	0	82	0
2	3.8	3.8	0	0	1	.	1	2	0	4	1.4	0	82	0
2	4.0	4.0	0	0	1	.	1	3	0	2	0.7	0	83	0
2	4.0	4.0	0	0	1	.	2	6	0	0	.	0	83	0
2	7.8	7.8	0	0	1	.	2	4	0	98	4.6	0	83	0
2	7.8	7.8	0	0	1	.	2	5	0	4	1.4	0	83	0
2	12.2	12.2	0	0	1	.	1	2	0	1.1	0.1	0	83	0
2	24.0	0.0	24	0	2	200	0	1	1	.	.	1	83	0
2	24.0	0.0	24	24	2	.	1	2	0	0	.	0	83	0
2	25.1	1.1	24	24	2	.	1	2	0	14.1	2.6	0	83	0

Example of dataset passing optional columns

Puzzle input

```
nm = list(pk = list(pk=as.data.frame(puzzle::df_pk_optional_columns)),
          dose=as.data.frame(puzzle::df_dose_optional_columns),
          cov=as.data.frame(puzzle::df_cov_time_dependent_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov),
        optionalcolumns=c("OCC", "TIMEPOINT", "TRT"))
```

```
## Automatic coercion to numeric for CMT
```

```
## 2=pk
```

```
## Automatic coercion to numeric for TRT
```

```
## 0=A
```

```
## 1=B
```

```
## Automatic coercion to numeric for SEX
```

```
## 0=F
```

```
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	OCC	TIMEPOINT	TRT	AGE	SEX
	1	0.0	0.0	0	0	1	100	1	1	.	.	1	1	0	0	77	1
	1	0.0	0.0	0	0	1	.	2	0	0	.	0	1	0	.	77	1
	1	1.0	1.0	0	0	1	.	2	0	10.8	2.4	0	1	1	.	77	1
	1	4.0	4.0	0	0	1	.	2	0	7.6	2	0	1	4	.	78	1
	1	12.0	12.0	0	0	1	.	2	0	2.3	0.8	0	1	12	.	78	1
	1	24.0	0.0	24	0	2	200	1	1	.	.	1	2	0	1	78	1
	1	24.0	0.0	24	24	2	.	2	0	0	.	0	2	24	.	78	1
	1	25.0	1.0	24	24	2	.	2	0	24.2	3.2	0	2	1	.	78	1
	2	0.0	0.0	0	0	1	100	1	1	.	.	1	1	0	0	82	0
	2	0.0	0.0	0	0	1	.	2	0	0	.	0	1	0	.	82	0
	2	0.9	0.9	0	0	1	.	2	0	7.3	2	0	1	1	.	82	0
	2	3.8	3.8	0	0	1	.	2	0	4	1.4	0	1	4	.	82	0
	2	12.2	12.2	0	0	1	.	2	0	1.1	0.1	0	1	12	.	83	0
	2	24.0	0.0	24	0	2	200	1	1	.	.	1	2	0	1	83	0
	2	24.0	0.0	24	24	2	.	2	0	0	.	0	2	24	.	83	0
	2	25.1	1.1	24	24	2	.	2	0	14.1	2.6	0	2	1	.	83	0

Example of dataset filling columns

Puzzle input

```
nm = list(pk = list(pk=as.data.frame(puzzle::df_pk_optional_columns)),
          dose=as.data.frame(puzzle::df_dose_optional_columns),
          cov=as.data.frame(puzzle::df_cov_time_dependent_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov),
        optionalcolumns=c("OCC", "TIMEPOINT", "TRT"),
        fillcolumns="TRT")
```

```
## Automatic coercion to numeric for CMT
## 2=pk
```

```
## Automatic coercion to numeric for TRT
## 0=A
## 1=B
```

```
## Automatic coercion to numeric for SEX
## 0=F
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	OCC	TIMEPOINT	TRT	AGE	SEX
	1	0.0	0.0	0	0	1	100	1	1	.	.	1	1	0	0	77	1
	1	0.0	0.0	0	0	1	.	2	0	0	.	0	1	0	0	77	1
	1	1.0	1.0	0	0	1	.	2	0	10.8	2.4	0	1	1	0	77	1
	1	4.0	4.0	0	0	1	.	2	0	7.6	2	0	1	4	0	78	1
	1	12.0	12.0	0	0	1	.	2	0	2.3	0.8	0	1	12	0	78	1
	1	24.0	0.0	24	0	2	200	1	1	.	.	1	2	0	1	78	1
	1	24.0	0.0	24	24	2	.	2	0	0	.	0	2	24	1	78	1
	1	25.0	1.0	24	24	2	.	2	0	24.2	3.2	0	2	1	1	78	1
	2	0.0	0.0	0	0	1	100	1	1	.	.	1	1	0	0	82	0
	2	0.0	0.0	0	0	1	.	2	0	0	.	0	1	0	0	82	0
	2	0.9	0.9	0	0	1	.	2	0	7.3	2	0	1	1	0	82	0
	2	3.8	3.8	0	0	1	.	2	0	4	1.4	0	1	4	0	82	0
	2	12.2	12.2	0	0	1	.	2	0	1.1	0.1	0	1	12	0	83	0
	2	24.0	0.0	24	0	2	200	1	1	.	.	1	2	0	1	83	0
	2	24.0	0.0	24	24	2	.	2	0	0	.	0	2	24	1	83	0
	2	25.1	1.1	24	24	2	.	2	0	14.1	2.6	0	2	1	1	83	0

Example of dataset using coercion

Puzzle input

```
nm = list(pk = list(pk=as.data.frame(puzzle::df_pk_optional_columns)),
          dose=as.data.frame(puzzle::df_dose_optional_columns),
          cov=as.data.frame(puzzle::df_cov_time_dependent_start))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov),
        coercion=list(name="coercion_file.txt"),
        optionalcolumns=c("OCC", "TIMEPOINT", "TRT"),
        fillcolumns="TRT")
```

```
## Automatic coercion to numeric for CMT
```

```
## 2=pk
```

```
## Automatic coercion to numeric for TRT
```

```
## 0=A
```

```
## 1=B
```

```
## Automatic coercion to numeric for SEX
```

```
## 0=F
```

```
## 1=M
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	OCC	TIMEPOINT	TRT	AGE	SEX
	1	0.0	0.0	0	0	1	100	1	1	.	.	1	1	0	0	77	1
	1	0.0	0.0	0	0	1	.	2	0	0	.	0	1	0	0	77	1
	1	1.0	1.0	0	0	1	.	2	0	10.8	2.4	0	1	1	0	77	1
	1	4.0	4.0	0	0	1	.	2	0	7.6	2	0	1	4	0	78	1
	1	12.0	12.0	0	0	1	.	2	0	2.3	0.8	0	1	12	0	78	1
	1	24.0	0.0	24	0	2	200	1	1	.	.	1	2	0	1	78	1
	1	24.0	0.0	24	24	2	.	2	0	0	.	0	2	24	1	78	1
	1	25.0	1.0	24	24	2	.	2	0	24.2	3.2	0	2	1	1	78	1
	2	0.0	0.0	0	0	1	100	1	1	.	.	1	1	0	0	82	0
	2	0.0	0.0	0	0	1	.	2	0	0	.	0	1	0	0	82	0
	2	0.9	0.9	0	0	1	.	2	0	7.3	2	0	1	1	0	82	0
	2	3.8	3.8	0	0	1	.	2	0	4	1.4	0	1	4	0	82	0
	2	12.2	12.2	0	0	1	.	2	0	1.1	0.1	0	1	12	0	83	0

2	24.0	0.0	24	0	2	200	1	1	.	.	1	2	0	1	83	0
2	24.0	0.0	24	24	2	.	2	0	0	.	0	2	24	1	83	0
2	25.1	1.1	24	24	2	.	2	0	14.1	2.6	0	2	1	1	83	0

Example of dataset with EVID = 4

Puzzle input

```
nm = list(pk = list(pk=as.data.frame(puzzle::df_pk)),
          dose=as.data.frame(puzzle::df_dose_evid4),
          cov=as.data.frame(puzzle::df_cov_evid4))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov),
        coercion=list(name="coercion_file.txt"),
        optionalcolumns=c("PERIOD", "TRT"),
        fillcolumns=c("PERIOD", "TRT"))
```

```
## Automatic coercion to numeric for CMT
## 2=pk
```

```
## Automatic coercion to numeric for TRT
## 0=Reference
## 1=Test
```

```
## Automatic coercion to numeric for FOOD
## 0=Fasted
```

```
## Automatic coercion to numeric for SEX
## 0=Female
## 1=Male
```

Puzzle output

C	ID	TIME	TAD	DOSETIME	PDOSETIME	NUMDOSE	AMT	CMT	EVID	DV	LDV	MDV	PERIOD	TRT	AGE	FOOD	HT	RACE	SEX	WT
	6	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	0	33	0	171	0	0	68.6
	6	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	0.0	0.0	0	0	2	.	2	0	0	.	0	1	1	33	0	171	0	0	68.6
	6	0.3	0.3	0	0	2	.	2	0	1.3	0.3	0	1	1	33	0	171	0	0	68.6
	6	0.6	0.6	0	0	2	.	2	0	3.1	1.1	0	1	1	33	0	171	0	0	68.6
	6	1.1	1.1	0	0	2	.	2	0	6.4	1.9	0	1	1	33	0	171	0	0	68.6
	6	2.0	2.0	0	0	2	.	2	0	6.3	1.8	0	1	1	33	0	171	0	0	68.6
	6	3.6	3.6	0	0	2	.	2	0	5.5	1.7	0	1	1	33	0	171	0	0	68.6
	6	5.0	5.0	0	0	2	.	2	0	4.9	1.6	0	1	1	33	0	171	0	0	68.6
	6	7.0	7.0	0	0	2	.	2	0	4	1.4	0	1	1	33	0	171	0	0	68.6
	6	9.2	9.2	0	0	2	.	2	0	3.5	1.2	0	1	1	33	0	171	0	0	68.6
	6	12.1	12.1	0	0	2	.	2	0	2.8	1	0	1	1	33	0	171	0	0	68.6
	6	23.9	23.9	0	0	2	.	2	0	0.9	-0.1	0	1	1	33	0	171	0	0	68.6
	6	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
	6	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
	6	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
	6	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
	6	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
	6	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
	6	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
	6	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
	6	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
	6	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6

6	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
6	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	1	33	0	171	0	0	68.6
6	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	0	33	0	171	0	0	68.6
7	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	0	23	0	171	0	0	69.6
7	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	0.0	0.0	0	0	2	.	2	0	0.2	-1.9	0	1	1	23	0	171	0	0	69.6
7	0.2	0.2	0	0	2	.	2	0	0.8	-0.2	0	1	1	23	0	171	0	0	69.6
7	0.5	0.5	0	0	2	.	2	0	2.4	0.9	0	1	1	23	0	171	0	0	69.6
7	1.0	1.0	0	0	2	.	2	0	5	1.6	0	1	1	23	0	171	0	0	69.6
7	2.0	2.0	0	0	2	.	2	0	6.6	1.9	0	1	1	23	0	171	0	0	69.6
7	3.5	3.5	0	0	2	.	2	0	7.1	2	0	1	1	23	0	171	0	0	69.6
7	5.0	5.0	0	0	2	.	2	0	6.7	1.9	0	1	1	23	0	171	0	0	69.6
7	7.0	7.0	0	0	2	.	2	0	5.2	1.7	0	1	1	23	0	171	0	0	69.6
7	9.0	9.0	0	0	2	.	2	0	4.4	1.5	0	1	1	23	0	171	0	0	69.6
7	12.1	12.1	0	0	2	.	2	0	3.5	1.3	0	1	1	23	0	171	0	0	69.6
7	24.2	24.2	0	0	2	.	2	0	1.1	0.1	0	1	1	23	0	171	0	0	69.6
7	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6

8	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	1	25	0	149	0	0	44.2
8	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	0.0	0.0	0	0	2	.	2	0	0	.	0	1	0	25	0	149	0	0	44.2
8	0.2	0.2	0	0	2	.	2	0	3	1.1	0	1	0	25	0	149	0	0	44.2
8	0.5	0.5	0	0	2	.	2	0	3	1.1	0	1	0	25	0	149	0	0	44.2
8	1.0	1.0	0	0	2	.	2	0	7.3	2	0	1	0	25	0	149	0	0	44.2
8	2.0	2.0	0	0	2	.	2	0	7.6	2	0	1	0	25	0	149	0	0	44.2
8	3.5	3.5	0	0	2	.	2	0	6.6	1.9	0	1	0	25	0	149	0	0	44.2
8	5.0	5.0	0	0	2	.	2	0	5.9	1.8	0	1	0	25	0	149	0	0	44.2
8	7.2	7.2	0	0	2	.	2	0	4.7	1.6	0	1	0	25	0	149	0	0	44.2
8	9.1	9.1	0	0	2	.	2	0	4.6	1.5	0	1	0	25	0	149	0	0	44.2
8	12.1	12.1	0	0	2	.	2	0	3	1.1	0	1	0	25	0	149	0	0	44.2
8	24.1	24.1	0	0	2	.	2	0	1.2	0.2	0	1	0	25	0	149	0	0	44.2
8	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
11	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	0	24	0	176	0	1	70.6
11	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	0.0	0.0	0	0	2	.	2	0	0	.	0	1	1	24	0	176	0	1	70.6

11	0.2	0.2	0	0	2	.	2	0	4.9	1.6	0	1	1	24	0	176	0	1	70.6
11	0.5	0.5	0	0	2	.	2	0	7.2	2	0	1	1	24	0	176	0	1	70.6
11	1.0	1.0	0	0	2	.	2	0	8	2.1	0	1	1	24	0	176	0	1	70.6
11	2.0	2.0	0	0	2	.	2	0	6.8	1.9	0	1	1	24	0	176	0	1	70.6
11	3.6	3.6	0	0	2	.	2	0	5.9	1.8	0	1	1	24	0	176	0	1	70.6
11	5.0	5.0	0	0	2	.	2	0	5.2	1.7	0	1	1	24	0	176	0	1	70.6
11	7.0	7.0	0	0	2	.	2	0	4.5	1.5	0	1	1	24	0	176	0	1	70.6
11	9.0	9.0	0	0	2	.	2	0	3.6	1.3	0	1	1	24	0	176	0	1	70.6
11	12.1	12.1	0	0	2	.	2	0	2.7	1	0	1	1	24	0	176	0	1	70.6
11	24.1	24.1	0	0	2	.	2	0	0.9	-0.2	0	1	1	24	0	176	0	1	70.6
11	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
3	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	1	21	0	169	0	0	79.4
3	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	0.0	0.0	0	0	2	.	2	0	0	.	0	1	0	21	0	169	0	0	79.4
3	0.3	0.3	0	0	2	.	2	0	4.4	1.5	0	1	0	21	0	169	0	0	79.4
3	0.6	0.6	0	0	2	.	2	0	6.9	1.9	0	1	0	21	0	169	0	0	79.4
3	1.0	1.0	0	0	2	.	2	0	8.2	2.1	0	1	0	21	0	169	0	0	79.4

3	2.0	2.0	0	0	2	.	2	0	7.8	2.1	0	1	0	21	0	169	0	0	79.4
3	3.6	3.6	0	0	2	.	2	0	7.5	2	0	1	0	21	0	169	0	0	79.4
3	5.1	5.1	0	0	2	.	2	0	6.2	1.8	0	1	0	21	0	169	0	0	79.4
3	7.1	7.1	0	0	2	.	2	0	5.3	1.7	0	1	0	21	0	169	0	0	79.4
3	9.0	9.0	0	0	2	.	2	0	4.9	1.6	0	1	0	21	0	169	0	0	79.4
3	12.2	12.2	0	0	2	.	2	0	3.7	1.3	0	1	0	21	0	169	0	0	79.4
3	24.2	24.2	0	0	2	.	2	0	1.1	0	0	1	0	21	0	169	0	0	79.4
3	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
2	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	1	32	0	167	0	0	80.4
2	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	0.0	0.0	0	0	2	.	2	0	0	.	0	1	0	32	0	167	0	0	80.4
2	0.3	0.3	0	0	2	.	2	0	1.7	0.5	0	1	0	32	0	167	0	0	80.4
2	0.5	0.5	0	0	2	.	2	0	7.9	2.1	0	1	0	32	0	167	0	0	80.4
2	1.0	1.0	0	0	2	.	2	0	8.3	2.1	0	1	0	32	0	167	0	0	80.4
2	1.9	1.9	0	0	2	.	2	0	8.3	2.1	0	1	0	32	0	167	0	0	80.4
2	3.5	3.5	0	0	2	.	2	0	6.8	1.9	0	1	0	32	0	167	0	0	80.4
2	5.0	5.0	0	0	2	.	2	0	6.1	1.8	0	1	0	32	0	167	0	0	80.4

2	7.0	7.0	0	0	2	.	2	0	5.4	1.7	0	1	0	32	0	167	0	0	80.4
2	9.0	9.0	0	0	2	.	2	0	4.5	1.5	0	1	0	32	0	167	0	0	80.4
2	12.0	12.0	0	0	2	.	2	0	3	1.1	0	1	0	32	0	167	0	0	80.4
2	24.3	24.3	0	0	2	.	2	0	0.9	-0.1	0	1	0	32	0	167	0	0	80.4
2	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
2	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4
4	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	0	28	0	167	1	0	67.2
4	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	0.0	0.0	0	0	2	.	2	0	0	.	0	1	1	28	0	167	1	0	67.2
4	0.4	0.4	0	0	2	.	2	0	1.9	0.6	0	1	1	28	0	167	1	0	67.2
4	0.6	0.6	0	0	2	.	2	0	4.6	1.5	0	1	1	28	0	167	1	0	67.2
4	1.1	1.1	0	0	2	.	2	0	8.6	2.2	0	1	1	28	0	167	1	0	67.2
4	2.1	2.1	0	0	2	.	2	0	8.4	2.1	0	1	1	28	0	167	1	0	67.2
4	3.5	3.5	0	0	2	.	2	0	7.5	2	0	1	1	28	0	167	1	0	67.2
4	5.0	5.0	0	0	2	.	2	0	6.9	1.9	0	1	1	28	0	167	1	0	67.2
4	7.0	7.0	0	0	2	.	2	0	5.8	1.8	0	1	1	28	0	167	1	0	67.2
4	9.0	9.0	0	0	2	.	2	0	5.3	1.7	0	1	1	28	0	167	1	0	67.2
4	12.0	12.0	0	0	2	.	2	0	4.2	1.4	0	1	1	28	0	167	1	0	67.2

4	24.6	24.6	0	0	2	.	2	0	1.1	0.1	0	1	1	28	0	167	1	0	67.2
4	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
9	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	0	31	0	160	0	0	70.6
9	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	0.0	0.0	0	0	2	.	2	0	0	.	0	1	1	31	0	160	0	0	70.6
9	0.3	0.3	0	0	2	.	2	0	7.4	2	0	1	1	31	0	160	0	0	70.6
9	0.6	0.6	0	0	2	.	2	0	9	2.2	0	1	1	31	0	160	0	0	70.6
9	1.1	1.1	0	0	2	.	2	0	7.1	2	0	1	1	31	0	160	0	0	70.6
9	2.0	2.0	0	0	2	.	2	0	6.3	1.8	0	1	1	31	0	160	0	0	70.6
9	3.5	3.5	0	0	2	.	2	0	5.7	1.7	0	1	1	31	0	160	0	0	70.6
9	5.0	5.0	0	0	2	.	2	0	5.7	1.7	0	1	1	31	0	160	0	0	70.6
9	7.2	7.2	0	0	2	.	2	0	4.2	1.4	0	1	1	31	0	160	0	0	70.6
9	8.8	8.8	0	0	2	.	2	0	4.1	1.4	0	1	1	31	0	160	0	0	70.6
9	11.6	11.6	0	0	2	.	2	0	3.2	1.2	0	1	1	31	0	160	0	0	70.6
9	24.4	24.4	0	0	2	.	2	0	1.1	0.1	0	1	1	31	0	160	0	0	70.6
9	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6

9	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
12	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	1	24	0	180	0	1	83.6
12	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	0.0	0.0	0	0	2	.	2	0	0	.	0	1	0	24	0	180	0	1	83.6
12	0.2	0.2	0	0	2	.	2	0	1.2	0.2	0	1	0	24	0	180	0	1	83.6
12	0.5	0.5	0	0	2	.	2	0	4	1.4	0	1	0	24	0	180	0	1	83.6
12	1.0	1.0	0	0	2	.	2	0	7.8	2.1	0	1	0	24	0	180	0	1	83.6
12	2.0	2.0	0	0	2	.	2	0	9.7	2.3	0	1	0	24	0	180	0	1	83.6
12	3.5	3.5	0	0	2	.	2	0	9.8	2.3	0	1	0	24	0	180	0	1	83.6
12	5.1	5.1	0	0	2	.	2	0	8.6	2.1	0	1	0	24	0	180	0	1	83.6
12	7.1	7.1	0	0	2	.	2	0	6.6	1.9	0	1	0	24	0	180	0	1	83.6
12	9.0	9.0	0	0	2	.	2	0	6.1	1.8	0	1	0	24	0	180	0	1	83.6
12	12.1	12.1	0	0	2	.	2	0	4.6	1.5	0	1	0	24	0	180	0	1	83.6
12	24.1	24.1	0	0	2	.	2	0	1.2	0.2	0	1	0	24	0	180	0	1	83.6
12	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6

12	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
10	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	1	28	0	168	0	1	78.4
10	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	0.0	0.0	0	0	2	.	2	0	0.2	-1.4	0	1	0	28	0	168	0	1	78.4
10	0.4	0.4	0	0	2	.	2	0	2.9	1.1	0	1	0	28	0	168	0	1	78.4
10	0.8	0.8	0	0	2	.	2	0	5.2	1.7	0	1	0	28	0	168	0	1	78.4
10	1.0	1.0	0	0	2	.	2	0	6.4	1.9	0	1	0	28	0	168	0	1	78.4
10	2.0	2.0	0	0	2	.	2	0	7.8	2.1	0	1	0	28	0	168	0	1	78.4
10	3.5	3.5	0	0	2	.	2	0	10.2	2.3	0	1	0	28	0	168	0	1	78.4
10	5.0	5.0	0	0	2	.	2	0	9.2	2.2	0	1	0	28	0	168	0	1	78.4
10	7.1	7.1	0	0	2	.	2	0	8	2.1	0	1	0	28	0	168	0	1	78.4
10	9.4	9.4	0	0	2	.	2	0	7.1	2	0	1	0	28	0	168	0	1	78.4
10	12.1	12.1	0	0	2	.	2	0	5.7	1.7	0	1	0	28	0	168	0	1	78.4
10	23.7	23.7	0	0	2	.	2	0	2.4	0.9	0	1	0	28	0	168	0	1	78.4
10	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4

10	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
1	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	0	23	0	160	1	0	62.4
1	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	0.0	0.0	0	0	2	.	2	0	0.7	-0.3	0	1	1	23	0	160	1	0	62.4
1	0.2	0.2	0	0	2	.	2	0	2.8	1	0	1	1	23	0	160	1	0	62.4
1	0.6	0.6	0	0	2	.	2	0	6.6	1.9	0	1	1	23	0	160	1	0	62.4
1	1.1	1.1	0	0	2	.	2	0	10.5	2.4	0	1	1	23	0	160	1	0	62.4
1	2.0	2.0	0	0	2	.	2	0	9.7	2.3	0	1	1	23	0	160	1	0	62.4
1	3.8	3.8	0	0	2	.	2	0	8.6	2.1	0	1	1	23	0	160	1	0	62.4
1	5.1	5.1	0	0	2	.	2	0	8.4	2.1	0	1	1	23	0	160	1	0	62.4
1	7.0	7.0	0	0	2	.	2	0	7.5	2	0	1	1	23	0	160	1	0	62.4
1	9.1	9.1	0	0	2	.	2	0	6.9	1.9	0	1	1	23	0	160	1	0	62.4
1	12.1	12.1	0	0	2	.	2	0	5.9	1.8	0	1	1	23	0	160	1	0	62.4
1	24.4	24.4	0	0	2	.	2	0	3.3	1.2	0	1	1	23	0	160	1	0	62.4
1	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4

1	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
5	0.0	0.0	0	0	1	0.5	1	4	.	.	1	2	1	36	0	169	0	0	82.4
5	0.0	0.0	0	0	2	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	0.0	0.0	0	0	2	.	2	0	0	.	0	1	0	36	0	169	0	0	82.4
5	0.3	0.3	0	0	2	.	2	0	2	0.7	0	1	0	36	0	169	0	0	82.4
5	0.5	0.5	0	0	2	.	2	0	5.6	1.7	0	1	0	36	0	169	0	0	82.4
5	1.0	1.0	0	0	2	.	2	0	11.4	2.4	0	1	0	36	0	169	0	0	82.4
5	2.0	2.0	0	0	2	.	2	0	9.3	2.2	0	1	0	36	0	169	0	0	82.4
5	3.5	3.5	0	0	2	.	2	0	8.7	2.2	0	1	0	36	0	169	0	0	82.4
5	5.0	5.0	0	0	2	.	2	0	7.6	2	0	1	0	36	0	169	0	0	82.4
5	7.0	7.0	0	0	2	.	2	0	7.1	2	0	1	0	36	0	169	0	0	82.4
5	9.1	9.1	0	0	2	.	2	0	5.9	1.8	0	1	0	36	0	169	0	0	82.4
5	12.0	12.0	0	0	2	.	2	0	4.4	1.5	0	1	0	36	0	169	0	0	82.4
5	24.4	24.4	0	0	2	.	2	0	1.6	0.5	0	1	0	36	0	169	0	0	82.4
5	36.0	0.0	36	0	3	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	36.0	0.0	36	36	4	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4
5	48.0	0.0	48	36	5	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	48.0	0.0	48	48	6	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4
5	60.0	0.0	60	48	7	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	60.0	0.0	60	60	8	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4
5	72.0	0.0	72	60	9	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	72.0	0.0	72	72	10	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4
5	84.0	0.0	84	72	11	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	84.0	0.0	84	84	12	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4
5	96.0	0.0	96	84	13	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	96.0	0.0	96	96	14	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4
5	108.0	0.0	108	96	15	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	108.0	0.0	108	108	16	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4

5	120.0	0.0	120	108	17	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	120.0	0.0	120	120	18	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4
5	132.0	0.0	132	120	19	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	132.0	0.0	132	132	20	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4
5	144.0	0.0	144	132	21	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	144.0	0.0	144	144	22	0.5	1	1	.	.	1	2	1	36	0	169	0	0	82.4

Example of dataset using arrange

Puzzle input

```
nm = list(pk = list(pk=as.data.frame(puzzle::df_pk)),
          dose=as.data.frame(puzzle::df_dose_evid4),
          cov=as.data.frame(puzzle::df_cov_evid4))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        cov=list(data=nm$cov),
        coercion=list(name="coercion_file.txt"),
        optionalcolumns=c("PERIOD", "TRT"),
        fillcolumns=c("PERIOD", "TRT"),
        arrange="ID,PERIOD,TIME,desc(MDV),CMT")
```

```
## Automatic coercion to numeric for CMT
## 2=pk
```

```
## Automatic coercion to numeric for TRT
## 0=Reference
## 1=Test
```

```
## Automatic coercion to numeric for FOOD
## 0=Fasted
```

```
## Automatic coercion to numeric for SEX
## 0=Female
## 1=Male
```

Puzzle output

6	2.0	-	144	144	22	.	2	0	6.3	1.8	0	2	0	33	0	171	0	0	68.6
		142.0																	
6	3.6	-	144	144	22	.	2	0	5.5	1.7	0	2	0	33	0	171	0	0	68.6
		140.4																	
6	5.0	-	144	144	22	.	2	0	4.9	1.6	0	2	0	33	0	171	0	0	68.6
		139.0																	
6	7.0	-	144	144	22	.	2	0	4	1.4	0	2	0	33	0	171	0	0	68.6
		137.0																	
6	9.2	-	144	144	22	.	2	0	3.5	1.2	0	2	0	33	0	171	0	0	68.6
		134.8																	
6	12.1	-	144	144	22	.	2	0	2.8	1	0	2	0	33	0	171	0	0	68.6
		131.9																	
6	23.9	-	144	144	22	.	2	0	0.9	-0.1	0	2	0	33	0	171	0	0	68.6
		120.2																	
7	0.0	0.0	0	0	1	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	1	23	0	171	0	0	69.6
7	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	0	23	0	171	0	0	69.6
7	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	0	23	0	171	0	0	69.6
7	0.0	-	144	144	22	.	2	0	0.2	-1.9	0	2	0	23	0	171	0	0	69.6
		144.0																	

7	0.2	-	144	144	22	.	2	0	0.8	-0.2	0	2	0	23	0	171	0	0	69.6
7	0.5	143.8	144	144	22	.	2	0	2.4	0.9	0	2	0	23	0	171	0	0	69.6
7	1.0	143.5	144	144	22	.	2	0	5	1.6	0	2	0	23	0	171	0	0	69.6
7	2.0	143.0	144	144	22	.	2	0	6.6	1.9	0	2	0	23	0	171	0	0	69.6
7	3.5	-	144	144	22	.	2	0	7.1	2	0	2	0	23	0	171	0	0	69.6
7	5.0	140.5	144	144	22	.	2	0	6.7	1.9	0	2	0	23	0	171	0	0	69.6
7	7.0	139.0	144	144	22	.	2	0	5.2	1.7	0	2	0	23	0	171	0	0	69.6
7	9.0	137.0	144	144	22	.	2	0	4.4	1.5	0	2	0	23	0	171	0	0	69.6
7	12.1	135.0	144	144	22	.	2	0	3.5	1.3	0	2	0	23	0	171	0	0	69.6
7	24.2	-	144	144	22	.	2	0	1.1	0.1	0	2	0	23	0	171	0	0	69.6
8	0.0	119.8	0	0	1	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	0	25	0	149	0	0	44.2
8	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	1	25	0	149	0	0	44.2
8	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2

8	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	1	25	0	149	0	0	44.2
8	0.0	-	144	144	22	.	2	0	0	.	0	2	1	25	0	149	0	0	44.2
8	0.2	144.0 -	144	144	22	.	2	0	3	1.1	0	2	1	25	0	149	0	0	44.2
8	0.5	143.8 -	144	144	22	.	2	0	3	1.1	0	2	1	25	0	149	0	0	44.2
8	1.0	143.5 -	144	144	22	.	2	0	7.3	2	0	2	1	25	0	149	0	0	44.2
8	2.0	143.0 -	144	144	22	.	2	0	7.6	2	0	2	1	25	0	149	0	0	44.2
8	3.5	142.0 -	144	144	22	.	2	0	6.6	1.9	0	2	1	25	0	149	0	0	44.2
8	5.0	140.5 -	144	144	22	.	2	0	5.9	1.8	0	2	1	25	0	149	0	0	44.2
8	7.2	138.9 -	144	144	22	.	2	0	4.7	1.6	0	2	1	25	0	149	0	0	44.2
8	9.1	136.8 -	144	144	22	.	2	0	4.6	1.5	0	2	1	25	0	149	0	0	44.2
8	12.1	134.9 -	144	144	22	.	2	0	3	1.1	0	2	1	25	0	149	0	0	44.2
8	24.1	131.9 -	144	144	22	.	2	0	1.2	0.2	0	2	1	25	0	149	0	0	44.2
11	0.0	119.9 0.0	0	0	1	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	1	24	0	176	0	1	70.6
11	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	0	24	0	176	0	1	70.6
11	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6

11	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	0	24	0	176	0	1	70.6
11	0.0	-	144	144	22	.	2	0	0	.	0	2	0	24	0	176	0	1	70.6
11	0.2	-	144	144	22	.	2	0	4.9	1.6	0	2	0	24	0	176	0	1	70.6
11	0.5	-	144	144	22	.	2	0	7.2	2	0	2	0	24	0	176	0	1	70.6
11	1.0	-	144	144	22	.	2	0	8	2.1	0	2	0	24	0	176	0	1	70.6
11	2.0	-	144	144	22	.	2	0	6.8	1.9	0	2	0	24	0	176	0	1	70.6
11	3.6	-	144	144	22	.	2	0	5.9	1.8	0	2	0	24	0	176	0	1	70.6
11	5.0	-	144	144	22	.	2	0	5.2	1.7	0	2	0	24	0	176	0	1	70.6
11	7.0	-	144	144	22	.	2	0	4.5	1.5	0	2	0	24	0	176	0	1	70.6
11	9.0	-	144	144	22	.	2	0	3.6	1.3	0	2	0	24	0	176	0	1	70.6
11	12.1	-	144	144	22	.	2	0	2.7	1	0	2	0	24	0	176	0	1	70.6
11	24.1	-	144	144	22	.	2	0	0.9	-0.2	0	2	0	24	0	176	0	1	70.6
3	0.0	0.0	0	0	1	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4

3	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	0	21	0	169	0	0	79.4
3	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	1	21	0	169	0	0	79.4
3	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	1	21	0	169	0	0	79.4
3	0.0	-	144	144	22	.	2	0	0	.	0	2	1	21	0	169	0	0	79.4
		144.0																	
3	0.3	-	144	144	22	.	2	0	4.4	1.5	0	2	1	21	0	169	0	0	79.4
		143.7																	
3	0.6	-	144	144	22	.	2	0	6.9	1.9	0	2	1	21	0	169	0	0	79.4
		143.4																	
3	1.0	-	144	144	22	.	2	0	8.2	2.1	0	2	1	21	0	169	0	0	79.4
		143.0																	
3	2.0	-	144	144	22	.	2	0	7.8	2.1	0	2	1	21	0	169	0	0	79.4
		142.0																	
3	3.6	-	144	144	22	.	2	0	7.5	2	0	2	1	21	0	169	0	0	79.4
		140.4																	
3	5.1	-	144	144	22	.	2	0	6.2	1.8	0	2	1	21	0	169	0	0	79.4
		138.9																	
3	7.1	-	144	144	22	.	2	0	5.3	1.7	0	2	1	21	0	169	0	0	79.4
		136.9																	
3	9.0	-	144	144	22	.	2	0	4.9	1.6	0	2	1	21	0	169	0	0	79.4
		135.0																	
3	12.2	-	144	144	22	.	2	0	3.7	1.3	0	2	1	21	0	169	0	0	79.4
		131.8																	
3	24.2	-	144	144	22	.	2	0	1.1	0	0	2	1	21	0	169	0	0	79.4
		119.8																	
2	0.0	0.0	0	0	1	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4
2	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4

2	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4	
2	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4	
2	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4	
2	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4	
2	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4	
2	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	0	32	0	167	0	0	80.4	
2	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	1	32	0	167	0	0	80.4	
2	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	1	32	0	167	0	0	80.4	
2	0.0	-	144	144	22	.	2	0	0	.	0	2	1	32	0	167	0	0	80.4	
2	0.3	144.0	-	144	144	22	.	2	0	1.7	0.5	0	2	1	32	0	167	0	0	80.4
2	0.5	143.7	-	144	144	22	.	2	0	7.9	2.1	0	2	1	32	0	167	0	0	80.4
2	1.0	143.5	-	144	144	22	.	2	0	8.3	2.1	0	2	1	32	0	167	0	0	80.4
2	1.9	143.0	-	144	144	22	.	2	0	8.3	2.1	0	2	1	32	0	167	0	0	80.4
2	3.5	142.1	-	144	144	22	.	2	0	6.8	1.9	0	2	1	32	0	167	0	0	80.4
2	5.0	140.5	-	144	144	22	.	2	0	6.1	1.8	0	2	1	32	0	167	0	0	80.4
2	7.0	139.0	-	144	144	22	.	2	0	5.4	1.7	0	2	1	32	0	167	0	0	80.4
2	9.0	137.0	-	144	144	22	.	2	0	4.5	1.5	0	2	1	32	0	167	0	0	80.4
2	12.0	135.0	-	144	144	22	.	2	0	3	1.1	0	2	1	32	0	167	0	0	80.4
2	24.3	132.0	-	144	144	22	.	2	0	0.9	-0.1	0	2	1	32	0	167	0	0	80.4
4	0.0	119.7	0.0	0	0	1	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2

4	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	1	28	0	167	1	0	67.2
4	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	0	28	0	167	1	0	67.2
4	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	0	28	0	167	1	0	67.2
4	0.0	-	144	144	22	.	2	0	0	.	0	2	0	28	0	167	1	0	67.2
4	0.4	-	144	144	22	.	2	0	1.9	0.6	0	2	0	28	0	167	1	0	67.2
4	0.6	-	144	144	22	.	2	0	4.6	1.5	0	2	0	28	0	167	1	0	67.2
4	1.1	-	144	144	22	.	2	0	8.6	2.2	0	2	0	28	0	167	1	0	67.2
4	2.1	-	144	144	22	.	2	0	8.4	2.1	0	2	0	28	0	167	1	0	67.2
4	3.5	-	144	144	22	.	2	0	7.5	2	0	2	0	28	0	167	1	0	67.2
4	5.0	-	144	144	22	.	2	0	6.9	1.9	0	2	0	28	0	167	1	0	67.2
4	7.0	-	144	144	22	.	2	0	5.8	1.8	0	2	0	28	0	167	1	0	67.2
4	9.0	-	144	144	22	.	2	0	5.3	1.7	0	2	0	28	0	167	1	0	67.2

4	12.0	- 132.0	144	144	22	.	2	0	4.2	1.4	0	2	0	28	0	167	1	0	67.2
4	24.6	- 119.3	144	144	22	.	2	0	1.1	0.1	0	2	0	28	0	167	1	0	67.2
9	0.0	0.0	0	0	1	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	1	31	0	160	0	0	70.6
9	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	0	31	0	160	0	0	70.6
9	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	0	31	0	160	0	0	70.6
9	0.0	- 144.0	144	144	22	.	2	0	0	.	0	2	0	31	0	160	0	0	70.6
9	0.3	- 143.7	144	144	22	.	2	0	7.4	2	0	2	0	31	0	160	0	0	70.6
9	0.6	- 143.4	144	144	22	.	2	0	9	2.2	0	2	0	31	0	160	0	0	70.6
9	1.1	- 142.9	144	144	22	.	2	0	7.1	2	0	2	0	31	0	160	0	0	70.6
9	2.0	- 142.0	144	144	22	.	2	0	6.3	1.8	0	2	0	31	0	160	0	0	70.6
9	3.5	- 140.5	144	144	22	.	2	0	5.7	1.7	0	2	0	31	0	160	0	0	70.6

9	5.0	- 139.0	144	144	22	.	2	0	5.7	1.7	0	2	0	31	0	160	0	0	70.6
9	7.2	- 136.8	144	144	22	.	2	0	4.2	1.4	0	2	0	31	0	160	0	0	70.6
9	8.8	- 135.2	144	144	22	.	2	0	4.1	1.4	0	2	0	31	0	160	0	0	70.6
9	11.6	- 132.4	144	144	22	.	2	0	3.2	1.2	0	2	0	31	0	160	0	0	70.6
9	24.4	- 119.6	144	144	22	.	2	0	1.1	0.1	0	2	0	31	0	160	0	0	70.6
12	0.0	0.0	0	0	1	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	0	24	0	180	0	1	83.6
12	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	1	24	0	180	0	1	83.6
12	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	1	24	0	180	0	1	83.6
12	0.0	- 144.0	144	144	22	.	2	0	0	.	0	2	1	24	0	180	0	1	83.6
12	0.2	- 143.8	144	144	22	.	2	0	1.2	0.2	0	2	1	24	0	180	0	1	83.6
12	0.5	- 143.5	144	144	22	.	2	0	4	1.4	0	2	1	24	0	180	0	1	83.6

12	1.0	- 143.0	144	144	22	.	2	0	7.8	2.1	0	2	1	24	0	180	0	1	83.6
12	2.0	- 142.0	144	144	22	.	2	0	9.7	2.3	0	2	1	24	0	180	0	1	83.6
12	3.5	- 140.5	144	144	22	.	2	0	9.8	2.3	0	2	1	24	0	180	0	1	83.6
12	5.1	- 138.9	144	144	22	.	2	0	8.6	2.1	0	2	1	24	0	180	0	1	83.6
12	7.1	- 136.9	144	144	22	.	2	0	6.6	1.9	0	2	1	24	0	180	0	1	83.6
12	9.0	- 135.0	144	144	22	.	2	0	6.1	1.8	0	2	1	24	0	180	0	1	83.6
12	12.1	- 131.9	144	144	22	.	2	0	4.6	1.5	0	2	1	24	0	180	0	1	83.6
12	24.1	- 119.8	144	144	22	.	2	0	1.2	0.2	0	2	1	24	0	180	0	1	83.6
10	0.0	0.0	0	0	1	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	0	28	0	168	0	1	78.4
10	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	1	28	0	168	0	1	78.4
10	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4
10	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	1	28	0	168	0	1	78.4

10	0.0	- 144.0	144	144	22	.	2	0	0.2	-1.4	0	2	1	28	0	168	0	1	78.4
10	0.4	- 143.6	144	144	22	.	2	0	2.9	1.1	0	2	1	28	0	168	0	1	78.4
10	0.8	- 143.2	144	144	22	.	2	0	5.2	1.7	0	2	1	28	0	168	0	1	78.4
10	1.0	- 143.0	144	144	22	.	2	0	6.4	1.9	0	2	1	28	0	168	0	1	78.4
10	2.0	- 141.9	144	144	22	.	2	0	7.8	2.1	0	2	1	28	0	168	0	1	78.4
10	3.5	- 140.4	144	144	22	.	2	0	10.2	2.3	0	2	1	28	0	168	0	1	78.4
10	5.0	- 138.9	144	144	22	.	2	0	9.2	2.2	0	2	1	28	0	168	0	1	78.4
10	7.1	- 136.9	144	144	22	.	2	0	8	2.1	0	2	1	28	0	168	0	1	78.4
10	9.4	- 134.6	144	144	22	.	2	0	7.1	2	0	2	1	28	0	168	0	1	78.4
10	12.1	- 131.9	144	144	22	.	2	0	5.7	1.7	0	2	1	28	0	168	0	1	78.4
10	23.7	- 120.3	144	144	22	.	2	0	2.4	0.9	0	2	1	28	0	168	0	1	78.4
1	0.0	0.0	0	0	1	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	1	23	0	160	1	0	62.4
1	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	0	23	0	160	1	0	62.4
1	36.0	0.0	36	0	13	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	48.0	0.0	48	36	14	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	60.0	0.0	60	48	15	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	72.0	0.0	72	60	16	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	84.0	0.0	84	72	17	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4

1	96.0	0.0	96	84	18	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	108.0	0.0	108	96	19	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	120.0	0.0	120	108	20	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	132.0	0.0	132	120	21	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	144.0	0.0	144	132	22	0.5	1	1	.	.	1	2	0	23	0	160	1	0	62.4
1	0.0	-	144	144	22	.	2	0	0.7	-0.3	0	2	0	23	0	160	1	0	62.4
1	0.2	144.0 -	144	144	22	.	2	0	2.8	1	0	2	0	23	0	160	1	0	62.4
1	0.6	143.8 -	144	144	22	.	2	0	6.6	1.9	0	2	0	23	0	160	1	0	62.4
1	1.1	143.4 -	144	144	22	.	2	0	10.5	2.4	0	2	0	23	0	160	1	0	62.4
1	2.0	142.9 -	144	144	22	.	2	0	9.7	2.3	0	2	0	23	0	160	1	0	62.4
1	3.8	142.0 -	144	144	22	.	2	0	8.6	2.1	0	2	0	23	0	160	1	0	62.4
1	5.1	140.2 -	144	144	22	.	2	0	8.4	2.1	0	2	0	23	0	160	1	0	62.4
1	7.0	138.9 -	144	144	22	.	2	0	7.5	2	0	2	0	23	0	160	1	0	62.4
1	9.1	137.0 -	144	144	22	.	2	0	6.9	1.9	0	2	0	23	0	160	1	0	62.4
1	12.1	134.9 -	144	144	22	.	2	0	5.9	1.8	0	2	0	23	0	160	1	0	62.4
1	24.4	131.9 -	144	144	22	.	2	0	3.3	1.2	0	2	0	23	0	160	1	0	62.4
5	0.0	119.6 0.0	0	0	1	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	36.0	0.0	36	0	2	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	48.0	0.0	48	36	3	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	60.0	0.0	60	48	4	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	72.0	0.0	72	60	5	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	84.0	0.0	84	72	6	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	96.0	0.0	96	84	7	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	108.0	0.0	108	96	8	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	120.0	0.0	120	108	9	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	132.0	0.0	132	120	10	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	144.0	0.0	144	132	11	0.5	1	1	.	.	1	1	0	36	0	169	0	0	82.4
5	0.0	0.0	0	0	12	0.5	1	4	.	.	1	2	1	36	0	169	0	0	82.4

[illegible]

Example of dataset using datetime

Puzzle input

```
nm = list(pk = list(pk=as.data.frame(puzzle::df_pk_datetime)),
          dose=as.data.frame(puzzle::df_dose_datetime))
```

Puzzle code

```
puzzle(directory=file.path(getwd()),
        order=c(1),
        pk=list(data=nm$pk),
        dose=list(data=nm$dose),
        datetimeformat="%Y-%m-%d %H:%M")

## Automatic coercion to numeric for CMT
## 2=pk

## Automatic coercion to numeric for BLQ
## 0=FALSE
## 1=TRUE
```

Puzzle output

C	ID	TIME	TIME0	TIME1	TAD	DOSETIME	PDOSETIME	AMT	CMT	EVID	DV	LDV	MDV	DV0	LDV0	MDV0	DV1	LDV1	MDV1	DVLLOQ	LDVLLOQ	MDVLLOQ	BLQ	LLOQ
	10002	-0.1	0.0	0.0	.	.	.	.	2	0	.	.	1	0	.	0	0	.	0	0	-3.7	0	1	0
	10002	0.0	0.0	0.1	0	0	0	3	1	1	.	.	1	.	.	1	.	.	1	.	.	1	.	.
	10002	0.2	0.2	0.3	0.2	0	0	.	2	0	1.4	0.3	0	1.4	0.3	0	1.4	0.3	0	1.4	0.3	0	0	0
	10002	0.5	0.5	0.6	0.5	0	0	.	2	0	8	2.1	0	8	2.1	0	8	2.1	0	8	2.1	0	0	0
	10002	1.0	1.0	1.1	1	0	0	.	2	0	13.5	2.6	0	13.5	2.6	0	13.5	2.6	0	13.5	2.6	0	0	0
	10002	2.0	2.0	2.1	2	0	0	.	2	0	13	2.6	0	13	2.6	0	13	2.6	0	13	2.6	0	0	0
	10002	3.0	3.0	3.1	3	0	0	.	2	0	9.9	2.3	0	9.9	2.3	0	9.9	2.3	0	9.9	2.3	0	0	0
	10002	4.0	4.0	4.1	4	0	0	.	2	0	7.3	2	0	7.3	2	0	7.3	2	0	7.3	2	0	0	0
	10002	6.0	6.0	6.1	6	0	0	.	2	0	4.1	1.4	0	4.1	1.4	0	4.1	1.4	0	4.1	1.4	0	0	0
	10002	8.0	8.0	8.1	8	0	0	.	2	0	2.9	1.1	0	2.9	1.1	0	2.9	1.1	0	2.9	1.1	0	0	0
	10002	12.1	12.1	12.1	12.1	0	0	.	2	0	1.9	0.6	0	1.9	0.6	0	1.9	0.6	0	1.9	0.6	0	0	0
	10002	24.1	24.1	24.1	24.1	0	0	.	2	0	1.1	0.1	0	1.1	0.1	0	1.1	0.1	0	1.1	0.1	0	0	0
	10002	36.0	36.0	36.1	36	0	0	.	2	0	0.7	-0.4	0	0.7	-0.4	0	0.7	-0.4	0	0.7	-0.4	0	0	0
	10002	48.0	48.0	48.1	48	0	0	.	2	0	0.7	-0.4	0	0.7	-0.4	0	0.7	-0.4	0	0.7	-0.4	0	0	0
	10006	-0.1	0.0	0.0	.	.	.	.	2	0	.	.	1	0	.	0	0	.	0	0	-3.7	0	1	0
	10006	0.0	0.0	0.1	0	0	0	3	1	1	.	.	1	.	.	1	.	.	1	.	.	1	.	.
	10006	0.2	0.2	0.3	0.2	0	0	.	2	0	.	.	1	0	.	0	0	.	0	0	-3.7	0	1	0
	10006	0.5	0.5	0.6	0.5	0	0	.	2	0	0.7	-0.3	0	0.7	-0.3	0	0.7	-0.3	0	0.7	-0.3	0	0	0
	10006	1.0	1.0	1.1	1	0	0	.	2	0	4.5	1.5	0	4.5	1.5	0	4.5	1.5	0	4.5	1.5	0	0	0
	10006	2.0	2.0	2.1	2	0	0	.	2	0	5.5	1.7	0	5.5	1.7	0	5.5	1.7	0	5.5	1.7	0	0	0
	10006	3.0	3.0	3.1	3	0	0	.	2	0	4.6	1.5	0	4.6	1.5	0	4.6	1.5	0	4.6	1.5	0	0	0
	10006	4.0	4.0	4.1	4	0	0	.	2	0	3.8	1.3	0	3.8	1.3	0	3.8	1.3	0	3.8	1.3	0	0	0
	10006	6.0	6.0	6.1	6	0	0	.	2	0	2.7	1	0	2.7	1	0	2.7	1	0	2.7	1	0	0	0
	10006	8.0	8.0	8.1	8	0	0	.	2	0	2.1	0.8	0	2.1	0.8	0	2.1	0.8	0	2.1	0.8	0	0	0
	10006	12.1	12.1	12.1	12.1	0	0	.	2	0	1.5	0.4	0	1.5	0.4	0	1.5	0.4	0	1.5	0.4	0	0	0
	10006	24.1	24.1	24.1	24.1	0	0	.	2	0	0.6	-0.6	0	0.6	-0.6	0	0.6	-0.6	0	0.6	-0.6	0	0	0
	10006	36.0	36.0	36.1	36	0	0	.	2	0	0.5	-0.8	0	0.5	-0.8	0	0.5	-0.8	0	0.5	-0.8	0	0	0
	10006	48.0	48.0	48.1	48	0	0	.	2	0	0.4	-1	0	0.4	-1	0	0.4	-1	0	0.4	-1	0	0	0
	10007	-0.1	0.0	0.0	.	.	.	.	2	0	.	.	1	0	.	0	0	.	0	0	-3.7	0	1	0
	10007	0.0	0.0	0.1	0	0	0	3	1	1	.	.	1	.	.	1	.	.	1	.	.	1	.	.
	10007	0.2	0.2	0.3	0.2	0	0	.	2	0	.	.	1	0	.	0	0	.	0	0	-3.7	0	1	0
	10007	0.5	0.5	0.6	0.5	0	0	.	2	0	1.3	0.2	0	1.3	0.2	0	1.3	0.2	0	1.3	0.2	0	0	0
	10007	1.0	1.0	1.1	1	0	0	.	2	0	10.6	2.4	0	10.6	2.4	0	10.6	2.4	0	10.6	2.4	0	0	0
	10007	2.0	2.0	2.1	2	0	0	.	2	0	9.7	2.3	0	9.7	2.3	0	9.7	2.3	0	9.7	2.3	0	0	0
	10007	3.0	3.0	3.1	3	0	0	.	2	0	5.7	1.7	0	5.7	1.7	0	5.7	1.7	0	5.7	1.7	0	0	0
	10007	4.0	4.0	4.1	4	0	0	.	2	0	5.8	1.8	0	5.8	1.8	0	5.8	1.8	0	5.8	1.8	0	0	0

10007	6.0	6.0	6.1	6	0	0	.	2	0	2.2	0.8	0	2.2	0.8	0	2.2	0.8	0	2.2	0.8	0	0	0
10007	8.0	8.0	8.1	8	0	0	.	2	0	1.4	0.3	0	1.4	0.3	0	1.4	0.3	0	1.4	0.3	0	0	0
10007	12.1	12.1	12.1	12.1	0	0	.	2	0	0.9	-0.1	0	0.9	-0.1	0	0.9	-0.1	0	0.9	-0.1	0	0	0
10007	24.1	24.1	24.1	24.1	0	0	.	2	0	0.8	-0.2	0	0.8	-0.2	0	0.8	-0.2	0	0.8	-0.2	0	0	0
10007	36.0	36.0	36.1	36	0	0	.	2	0	0.7	-0.4	0	0.7	-0.4	0	0.7	-0.4	0	0.7	-0.4	0	0	0
10007	48.0	48.0	48.1	48	0	0	.	2	0	0.6	-0.4	0	0.6	-0.4	0	0.6	-0.4	0	0.6	-0.4	0	0	0
10008	-0.1	0.0	0.0	.	.	.	.	2	0	.	.	1	0	.	0	0	.	0	0	-3.7	0	1	0
10008	0.0	0.0	0.1	0	0	0	3	1	1	.	.	1	.	.	1	.	.	1	.	.	1	.	.
10008	0.2	0.2	0.3	0.2	0	0	.	2	0	0.1	-2.4	0	0.1	-2.4	0	0.1	-2.4	0	0.1	-2.4	0	0	0
10008	0.5	0.5	0.6	0.5	0	0	.	2	0	3.9	1.4	0	3.9	1.4	0	3.9	1.4	0	3.9	1.4	0	0	0
10008	1.0	1.0	1.1	1	0	0	.	2	0	9	2.2	0	9	2.2	0	9	2.2	0	9	2.2	0	0	0
10008	2.0	2.0	2.1	2	0	0	.	2	0	10.7	2.4	0	10.7	2.4	0	10.7	2.4	0	10.7	2.4	0	0	0
10008	3.0	3.0	3.1	3	0	0	.	2	0	8.4	2.1	0	8.4	2.1	0	8.4	2.1	0	8.4	2.1	0	0	0
10008	4.0	4.0	4.1	4	0	0	.	2	0	6.9	1.9	0	6.9	1.9	0	6.9	1.9	0	6.9	1.9	0	0	0
10008	6.0	6.0	6.1	6	0	0	.	2	0	3.8	1.3	0	3.8	1.3	0	3.8	1.3	0	3.8	1.3	0	0	0
10008	8.0	8.0	8.1	8	0	0	.	2	0	3.1	1.1	0	3.1	1.1	0	3.1	1.1	0	3.1	1.1	0	0	0
10008	12.1	12.1	12.1	12.1	0	0	.	2	0	1.8	0.6	0	1.8	0.6	0	1.8	0.6	0	1.8	0.6	0	0	0
10008	24.1	24.1	24.1	24.1	0	0	.	2	0	0.9	-0.1	0	0.9	-0.1	0	0.9	-0.1	0	0.9	-0.1	0	0	0
10008	36.0	36.0	36.1	36	0	0	.	2	0	0.7	-0.4	0	0.7	-0.4	0	0.7	-0.4	0	0.7	-0.4	0	0	0
10008	48.0	48.0	48.1	48	0	0	.	2	0	0.6	-0.5	0	0.6	-0.5	0	0.6	-0.5	0	0.6	-0.5	0	0	0
10009	-0.1	0.0	0.0	.	.	.	.	2	0	.	.	1	0	.	0	0	.	0	0	-3.7	0	1	0
10009	0.0	0.0	0.1	0	0	0	3	1	1	.	.	1	.	.	1	.	.	1	.	.	1	.	.
10009	0.2	0.2	0.3	0.2	0	0	.	2	0	.	.	1	0	.	0	0	.	0	0	-3.7	0	1	0
10009	0.5	0.5	0.6	0.5	0	0	.	2	0	1.4	0.3	0	1.4	0.3	0	1.4	0.3	0	1.4	0.3	0	0	0
10009	1.0	1.0	1.1	1	0	0	.	2	0	14.9	2.7	0	14.9	2.7	0	14.9	2.7	0	14.9	2.7	0	0	0
10009	2.0	2.0	2.1	2	0	0	.	2	0	17.9	2.9	0	17.9	2.9	0	17.9	2.9	0	17.9	2.9	0	0	0
10009	3.0	3.0	3.1	3	0	0	.	2	0	12.4	2.5	0	12.4	2.5	0	12.4	2.5	0	12.4	2.5	0	0	0
10009	4.0	4.0	4.1	4	0	0	.	2	0	7.5	2	0	7.5	2	0	7.5	2	0	7.5	2	0	0	0
10009	6.0	6.0	6.1	6	0	0	.	2	0	4	1.4	0	4	1.4	0	4	1.4	0	4	1.4	0	0	0
10009	8.0	8.0	8.1	8	0	0	.	2	0	2.7	1	0	2.7	1	0	2.7	1	0	2.7	1	0	0	0
10009	12.1	12.1	12.1	12.1	0	0	.	2	0	1.9	0.7	0	1.9	0.7	0	1.9	0.7	0	1.9	0.7	0	0	0
10009	24.1	24.1	24.1	24.1	0	0	.	2	0	1.3	0.3	0	1.3	0.3	0	1.3	0.3	0	1.3	0.3	0	0	0
10009	36.0	36.0	36.1	36	0	0	.	2	0	0.9	-0.1	0	0.9	-0.1	0	0.9	-0.1	0	0.9	-0.1	0	0	0
10009	48.0	48.0	48.1	48	0	0	.	2	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0