Tabular

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tabular

We make a sample data frame.

Listing 1:

```
> x <- data.frame(
+   study=c(rep('PROT01',5),NA),
+   subject=rep(c(1001,1002),each=3),
+   time=c(0,1,2,0,1,2),
+   conc=c(0.12,34,5.6,.5,200,NA)
+ )
> x
```

```
   study subject time   conc
1 PROT01    1001    0   0.12
2 PROT01    1001    1  34.00
3 PROT01    1001    2   5.60
4 PROT01    1002    0   0.50
5 PROT01    1002    1 200.00
6   <NA>    1002    2     NA
```

Now we try various invocations.

Listing 2:

```
> writeLines(ltable(x))
```

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Listing 3:

```
> writeLines(ltable(x,environments=NULL))
```

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Table 1: Plasma Concentrations

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Listing 4:

```
> writeLines(ltable(x,caption='Plasma Concentrations',label='pctab'))
```

Listing 5:

```
> writeLines(ltable(x,caption='Plasma Concentrations',cap.top=FALSE))
```

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Table 2: Plasma Concentrations

Listing 6:

```
> writeLines(ltable(x,grid=TRUE,caption='grid is TRUE'))
```

Table 3: grid is TRUE

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Listing 7:

```
> writeLines(ltable(x,grid=TRUE,caption='Includes Walls',walls=1,rules=c(1,2,1)))
```

Table 4: Includes Walls

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Listing 8:

```
> writeLines(ltable(x,grid=TRUE,caption='Custom Breaks',
+     colbreaks=c(0,2,0),rowgroups=x$subject
+ ))
```

Table 5: Custom Breaks

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Listing 9:

```
> writeLines(ltable(x,grid=TRUE,caption='Custom Justify',
+     numjust='left',charjust='right'
+ ))
```

Table 6: Custom Justify

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Listing 10:

```
> writeLines(ltable(x,grid=TRUE,caption='Decimal Align',
```

```
+     justify=c('center','left','right','decimal')
+ ))
```

Table 7: Decimal Align

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34
PROT01	1001	2	5.6
PROT01	1002	0	0.5
PROT01	1002	1	200
	1002	2	

Listing 11:

```
> writeLines(ltable(x,grid=TRUE,caption='Not Verbatim',
+     justify=c('center','left','right','decimal'),
+     verbatim=FALSE
+ ))
```

Table 8: Not Verbatim

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34
PROT01	1001	2	5.6
PROT01	1002	0	0.5
PROT01	1002	1	200
	1002	2	

Listing 12:

```
> writeLines(ltable(x,grid=TRUE,caption='Custom Column Width',
+     justify=c('center','left','right','decimal'),
+     colwidth=c(NA,NA,NA,'2cm')
+ ))
```

Listing 13:

```
> writeLines(ltable(x,caption='Row Colors',rowcolors=c('white','lightgray')))
```

Listing 14:

```
> writeLines(
+   ltable(
+     x,
+     caption='Row Groups',
```

Table 9: Custom Column Width

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34
PROT01	1001	2	5.6
PROT01	1002	0	0.5
PROT01	1002	1	200
	1002	2	

Table 10: Row Colors

study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

```
+     rowgroups=as.character(x$subject),
+     rowgrouplabel='groups',
+     rowgrouprule = 2
+   )
+ )
```

Table 11: Row Groups

groups	study	subject	time	conc
	PROT01	1001	0	0.12
1001	PROT01	1001	1	34.00
	PROT01	1001	2	5.60
	PROT01	1002	0	0.50
1002	PROT01	1002	1	200.00
		1002	2	

Listing 15:

```
> writeLines(
+   ltable(
+     x,
+     caption='Column Groups',
+     colgroups=c('demographic','demographic','clinical','clinical')
+   )
+ )
```

Table 12: Column Groups

demographic		clinical	
study	subject	time	conc
PROT01	1001	0	0.12
PROT01	1001	1	34.00
PROT01	1001	2	5.60
PROT01	1002	0	0.50
PROT01	1002	1	200.00
	1002	2	

Listing 16:

```
> writeLines(
+   ltable(
+     x,
+     caption='Row and Column Groups',
+     rowgroups=as.character(x$subject),
+     colgroups=c('demographic','demographic','clinical','clinical'),
+     rowgrouprule = 1,
+     grid=TRUE
+   )
+ )
```

Table 13: Row and Column Groups

	demographic		clinical	
	study	subject	time	conc
1001	PROT01	1001	0	0.12
	PROT01	1001	1	34.00
	PROT01	1001	2	5.60
1002	PROT01	1002	0	0.50
	PROT01	1002	1	200.00
		1002	2	