## tabular

We make a sample data frame.

```
> x <- data.frame(</pre>
   study=c(rep('PROTO1',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
                  1 34.00
2 PROT01
          1001
3 PROT01
        1001
                  2
                     5.60
4 PROT01 1002
                0 0.50
5 PROTO1
          1002
                1 200.00
6 <NA>
           1002
                  2
                      NA
```

Now we try various invocations.

> 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	

> 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	

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

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	

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

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

```
> 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	

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

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

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	

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	

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	

```
> 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	

```
> 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	

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

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	