The R environment for computing and graphics.   This follows the `Sweave` example at
http://jacobwegelin.net/prn/20120718Wed143201/, with modifications so that we can use the `knitr` package instead of `Sweave`.

Suppose you have a table (or matrix or dataframe) with a lot of text in a cell, such as the following.

```r
library(knitr)
library(xtable)
library(tools)
set.seed(5)
bigmess<-
data.frame(
freeText=c("I have done the state some service and they know it. No more of that. I pray you,
in your letters, When you shall these unlucky deeds relate, Speak of me as I am. Nothing
extenuate, Nor set down aught in malice."
, "ignotumque sibi mentula discat opus"
, "denique cum membris conlatis flore fruuntur aetatis, iam cum praesagit gaudia corpus"
, "cum dicis propero fac si facis Hedyle languet protinus et cessat debilitata Venus.
exspectare jube. velocius ibo retentus.")
, x=sample(1:199, size=4, replace=FALSE))
bigmess$group<- sample(LETTERS, replace=TRUE, size= nrow(bigmess))
# Note that bigmess has three variables (columns):
names(bigmess)


## [1] "freeText" "x"        "group"
```

In knitr let's display the table. First we demonstrate that in knitr, the option "results='markup'" is kinda like specifying the verbatim environment in LaTeX. This is not what we want:

```r
tmess <- xtable(as.matrix(bigmess))
print(tmess, include.rownames = FALSE)


## % latex table generated in R 2.15.0 by xtable 1.7-0 package
## % Wed Jul 18 18:33:59 2012
## \begin{table}[ht]
## \begin{center}
## \begin{tabular}{lll}
##    \hline
## freeText & x & group \\
##    \hline
## I have done the state some service and they know it. No more of that. I pray you, in your letters,
##    ignotumque sibi mentula discat opus & 136 & S \\
##    denique cum membris conlatis flore fruuntur aetatis, iam cum praesagit gaudia corpus & 181 & N \
##    cum dicis propero fac si facis Hedyle languet protinus et cessat debilitata Venus. exspectare ju
##    \hline
## \end{tabular}
## \end{center}
## \end{table}
```

We will change to "results='asis'" to get the table to display in LaTeX. But when we "naïvely" use xtable with the default values for print(), the table marches off the page and we don't even see all of the first column:

```
tmess <- xtable(as.matrix(bigmess))
print(tmess, include.rownames = FALSE)
```

freeText
I have done the state some service and they know it. No more of that. I pray you, in your letters, When you shall these
ignotumque sibi mentula discat opus
denique cum membris conlatis flore fruuntur aetatis, iam cum praesagit gaudia corpus
cum dicis propero fac si facis Hedyle languet protinus et cessat debilitata Venus. exspectare jube. velocius ibo retentus.

To remedy this, we'd like to squeeze or squish (depending on which part of the English-speaking world we're from) the "freeText" column into a "multicolumn" situation (in LaTeX lingo), which is like opening a spreadsheet in Excel®, highlighting the first column, specifying "wrap text", and messing around with the mouse—but much better, because automated and reproducible.

```
align(tmess) <- c("r", "p{3.5in}", "c", "c")
print(tmess, include.rownames = FALSE)
```

freeText	x	group
I have done the state some service and they know it. No more of that. I pray you, in your letters, When you shall these unlucky deeds relate, Speak of me as I am. Nothing extenuate, Nor set down aught in malice.	40	C
ignotumque sibi mentula discat opus	136	S
denique cum membris conlatis flore fruuntur aetatis, iam cum praesagit gaudia corpus	181	N
cum dicis propero fac si facis Hedyle languet protinus et cessat debilitata Venus. exspectare jube. velocius ibo retentus.	56	V

But now let's run an identical chunk, except that "echo=FALSE".

freeText	x	group
I have done the state some service and they know it. No more of that. I pray you, in your letters, When you shall these unlucky deeds relate, Speak of me as I am. Nothing extenuate, Nor set down aught in malice.	40	C
ignotumque sibi mentula discat opus	136	S
denique cum membris conlatis flore fruuntur aetatis, iam cum praesagit gaudia corpus	181	N
cum dicis propero fac si facis Hedyle languet protinus et cessat debilitata Venus. exspectare jube. velocius ibo retentus.	56	V

The fine print:

```
# knit('knitfoo.Rnw')
#
# texi2dvi('knitfoo.tex', pdf = TRUE)
sessionInfo()


## R version 2.15.0 (2012-03-30)
## Platform: x86_64-apple-darwin9.8.0/x86_64 (64-bit)
##
## locale:
## [1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8
##
## attached base packages:
## [1] tools     stats     graphics  grDevices utils     datasets  methods
## [8] base
```

```
##
## other attached packages:
## [1] xtable_1.7-0 knitr_0.6
##
## loaded via a namespace (and not attached):
##  [1] codetools_0.2-8 digest_0.5.2    evaluate_0.4.2  formatR_0.4
##  [5] highlight_0.3.1 parser_0.0-14   plyr_1.7.1      psych_1.2.1
##  [9] Rcpp_0.9.10     stringr_0.6
```