


A Minimal Demo of knitr with Beamer and Fragile Frames

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¹I thank Richard E. Goldberg for providing this demo. 

Background

knitr, Beamer,
and
FragileFrame

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First Test

Second Test

The Big
Question

- The **knitr** package allows you to embed R code and figures in \LaTeX documents
 - It has functionality similar to Sweave but looks nicer and gives you more control
- If you already have Sweave working in \LaTeX , getting **knitr** to work is trivial
 - 1 Install the **knitr** package in *R*
 - 2 Read <https://yihui.name/knitr/demo/lyx/>
- If you use Sweave or **knitr** with Beamer in \LaTeX , you must use the *FragileFrame* environment for the frames that contain R code chunks. Let's see if **knitr** works with Beamer in this small demo.

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OK, let's get started with just some text:

```
# create some random numbers
(x=rnorm(20))

## [1] 0.1449583 0.4383221 0.1531912 1.0849426 1.9995449
## [6] -0.8118832 0.1602680 0.5858923 0.3600880 -0.0253084
## [11] 0.1508809 0.1100824 1.3596812 -0.3269946 -0.7163819
## [16] 1.8097690 0.5084011 -0.5274603 0.1327188 -0.1559430

mean(x);var(x)

## [1] 0.3217385
## [1] 0.5714534
```

BTW, the first element of `x` is 0.1449583. (Did you notice the use of `\Sexpr{}`?)

Second Test

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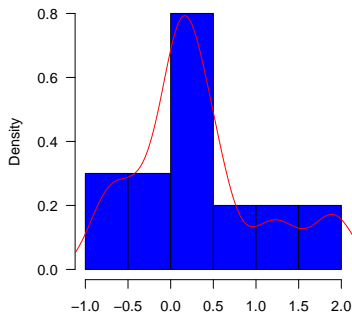
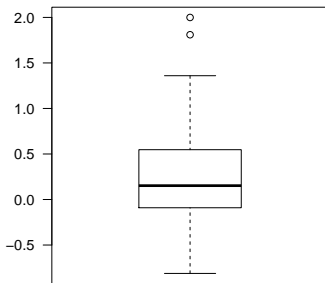
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Text is nice but let's see what happens if we make a couple of plots in our chunk:

```
par(las=1,mar=c(4,4,.1,.1)) # tick labels direction
boxplot(x)
hist(x,main='',col="blue",probability=TRUE)
lines(density(x),col="red")
```



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Do the above chunks work? You should be able to compile the LyX document and get a nice-looking PDF slide presentation. If not, time to double-check everything...