

# MIT math 18-065

#Lecture 1

Just want to see how to put in python chunk and if assigning value puts into R Global Environment.

```
import math
a = 2 * math.pi
a
```

```
## 6.283185307179586
```

I didn't put anything in Rcpp because I don't remember how to do main and all that

Just for fun, put in bash ls.

```
ls

## create_new_repo.txt
## create_new_repo.txt~
## EdelmanPresentation.pdf
## helloworld.py
## Lecture_01.html
## Lecture_01.Rmd
## Lecture03_Julia.ipynb
## Lecture03_Python.ipynb
## Lecture04_Python.ipynb
## Lecture06_Python.ipynb
## Lecture36_Julia.ipynb
## MIT_math_18-065.Rproj
## README.md
## svd_stuff.m
```

OK, we enter a 3 x 3 matrix and then to select random vector from column space we create random vector x and then Ax.

```
A <- matrix(data = c(2, 3, 5, 1, 1, 7, 3, 4, 12), nrow = 3)
x <- sample.int(10, size = 3, replace = TRUE)
A %*% x
```

```
##      [,1]
## [1,]   25
## [2,]   32
## [3,]  112
```