Regression Models: Assignment 1

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Importing libraries

```
library(dplyr)
```

Exercise 1

Simulation

```
sim = list()
for (j in 1:1000) {
    vals = c()
    for (i in 1:100) {
        run = 3 + 3*cos(i/10 + 50) + rnorm(1, mean=0, sd=1)
            vals = c(vals, run)
    }
    sim[[j]] = vals
}
sim
```

Exercise 2

Importing the data

```
d <- data.frame(read.table('../data/index.txt', header=TRUE))</pre>
```

 $\mathrm{d}\mathrm{d}$