

## Lab 08

### Exercise

1.

```
setwd("C:\\Users\\it24100500\\Desktop\\IT24100500")
getwd()

data <- read.table("Exercise - Laptopsweights.txt", header = TRUE)
fix(data)
attach(data)

popmn <- mean(weight.kg.)
popvar <- var(weight.kg.)
pop_dev <- sd (weight.kg.)

> setwd("C:\\Users\\it24100500\\Desktop\\IT24100500")
> getwd()
[1] "C:/Users/it24100500/Desktop/IT24100500"
> data <- read.table("Exercise - Laptopsweights.txt", header = TRUE)
> fix(data)
> attach(data)
> popmn <- mean(weight.kg.)
> popvar <- var(weight.kg.)
> pop_dev <- sd (weight.kg.)
```

data	40 obs. of 1 variable
values	
pop_dev	0.256106948813907
popmn	2.468
popvar	0.0655907692307692

2.

```
11 samples <- c() #Q2
12 n <- c()
13
14 for(i in 1:25){
15   s <- sample(weight.kg., 6, replace=TRUE)
16   samples <- cbind(samples, s)
17   n <- c(n, paste('s', i))
18 }
19 colnames(samples) = n
20
21 s.means <- apply(samples, 2, mean)
22 s.vars <- apply(samples, 2, var)
23 s.dev <- apply(samples, 2, sd)
24
```

3.

```
25 samplemean <- mean(s.means)
26 sampledev <- sd(s.means)
27
28 popmn
29 samplemean
30
31 pop_dev
32 sampledev
```

```
>
> popmn
[1] 2.468
> samplemean
[1] 2.457
>
> pop_dev
[1] 0.2561069
> sampledev
[1] 0.08929638
> |
```