INPUT

```r
#Exercise - IT24102704

getwd()
setwd("C:\\Users\\daham\\Desktop\\ps\\IT24102704\\8")


#importing dataset
data <- read.table("Exercise - LaptopsWeights.txt",header=TRUE)
fix(data)
attach(data)

#1
popmn <- mean(weight.kg.)
popmn
popsd <- sd(weight.kg.)
popsd

#2
samples <- c()
samples
n<- c()
n

for(i in 1:25){
  s<- sample(weight.kg.,6,replace=TRUE)
  samples<- cbind(samples,s)
  n<-c(n,paste('s',i))
}

colnames(samples)=n
s.means<- apply(samples,2,mean)
s.means
s.sds<- apply(samples,2,sd)
s.sds


#3
samplemean<- mean(s.means)
samplemean
samplesd<-sd(s.sds)
samplesd
```

OUTPUT

```
> #Exercise - IT24102704
>
> getwd()
[1] "C:/Users/daham/Desktop/pS/IT24102704"
> setwd("C:\\Users\\daham\\Desktop\\pS\\IT24102704\\8")
>
>
> #importing dataset
> data <- read.table("Exercise - LaptopsWeights.txt",header=TRUE)
> fix(data)
> attach(data)
>
> #1
> popmn <- mean(weight.kg.)
> popmn
[1] 2.468
> popsd <- sd(weight.kg.)
> popsd
[1] 0.2561069
>
> #2
> samples <- c()
> samples
NULL
> n<- c()
> n
NULL
>
> for(i in 1:25){
+   s<- sample(weight.kg.,6,replace=TRUE)
+   samples<- cbind(samples,s)
+   n<-c(n,paste('s',i))
+ }
>
> colnames(samples)=n
> s.means<- apply(samples,2,mean)
> s.means
```

```
> s.means
     s 1      s 2      s 3      s 4      s 5      s 6      s 7      s 8      s 9     s 10     s 11     s 12     s 13
2.446667 2.636667 2.336667 2.526667 2.521667 2.648333 2.408333 2.621667 2.376667 2.413333 2.391667 2.575000 2.385000
    s 14     s 15     s 16     s 17     s 18     s 19     s 20     s 21     s 22     s 23     s 24     s 25
2.558333 2.490000 2.276667 2.388333 2.431667 2.536667 2.476667 2.586667 2.470000 2.336667 2.503333 2.535000
> s.sds<- apply(samples,2,sd)
> s.sds
      s 1       s 2       s 3       s 4       s 5       s 6       s 7       s 8       s 9      s 10      s 11      s 12
0.1330664 0.1525341 0.2973662 0.3096880 0.2110371 0.1517124 0.2591074 0.2149806 0.2320057 0.2322642 0.2256029 0.1942936
     s 13      s 14      s 15      s 16      s 17      s 18      s 19      s 20      s 21      s 22      s 23      s 24
0.2317542 0.1487840 0.1438054 0.3738806 0.2381946 0.3142876 0.2244697 0.1543589 0.1762574 0.2605379 0.3897521 0.1598332
     s 25
0.1710848
>
> #3
> samplemean<- mean(s.means)
> samplemean
[1] 2.475133
> samplesd<-sd(s.sds)
> samplesd
[1] 0.0706069
> #Exercise - IT24102704
>
> getwd()
[1] "C:/Users/daham/Desktop/ps/IT24102704/8"
> setwd("C:\\Users\\daham\\Desktop\\ps\\IT24102704\\8")
>
>
> #importing dataset
> data <- read.table("Exercise - Laptopsweights.txt",header=TRUE)
> fix(data)
```