Lab Exercises

1. Consider the dataset *Sonar* from package **mlbench**. Calculate the coefficient of variation of variables V1 to V60 using any apply family function.

2. Obtain Mean – 3 SD and Mean +3 SD for each element in the following list: (Output can be a list)

```
lstDist <- list(binomialDist=rbinom(50000,10000,0.023),
                poissonDist=rpois(45000,230),
                normalDist1=rnorm(40000,230,30),
                normDist2=rnorm(40000,230,40))
```

3. Obtain Mean and SD for each element in the following list: (Output should be matrix)

```
lstDist <- list(binomialDist=rbinom(50000,10000,0.023),
                poissonDist=rpois(45000,230),
                normalDist1=rnorm(40000,230,30),
                normDist2=rnorm(40000,230,40))
```

4. Consider the dataset *Salaries* in package **carData**. Calculate the mean of variable *salary* for each category in the variable *rank.*

5. Consider the dataset *Housing* from package **Ecdat.** Create two datasets out of it in such a way that only numeric remain in one dataset named *HousingNum* and categorical remain in the dataset *HousingFact*.