WEEK5:

PROBLEM DEFINATION:
a)How to find a corelation matrix and plot the correlation on iris data set
SOURCE CODE:

```
d<-data.frame(x1=rnorm(!0),x2=rnorm(10),x3=rnorm(10))
cor(d)
m<-cor(d)  #get correlations
library(„corrplot")
corrplot(m,method="square") x<-
matrix(rnorm(2),,nrow=5,ncol=4) y<-
matrix(rnorm(15),nrow=5,ncol=3)
COR<-cor(x,y)
COR
```

PROBLEM DEFINATION:
b) Plot the correlation plot on dataset and visualize giving an overview of   relationships among data on iris data.

SOURCE CODE:

```
Image(x=seq(dim(x)[2])
Y<-seq(dim(y)[2])
Z=COR,xlab="xcolumn",ylab="y column")
Library(gtlcharts)
Data(iris)
Iris$species<-NULL
Iplotcorr(iris,reoder=TRUE
```
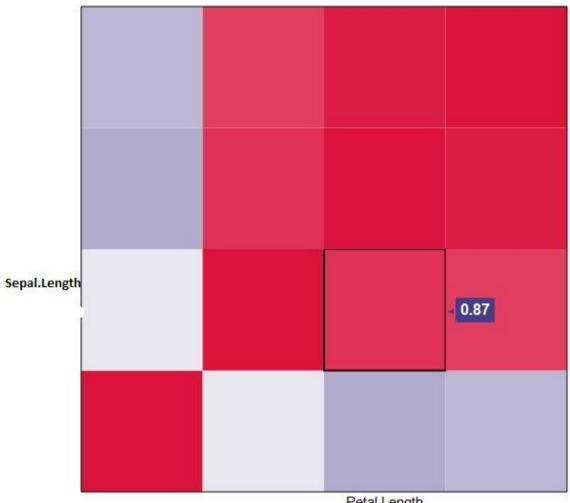
PROBLEM DEFINATION:
c) **Analysis of covariance: variance (ANOVA), if data have categorical variables on iris data.**
SOURCE CODE:

```
library(ggplot2)
data(iris)
str(iris)
ggplot(data=iris,aes(x=sepal.length,y=petal.length))+geom_point(size=2,colour="black")+geom_
point(size=1,colour="white")+geom_smooth(aes(colour="black"),method="lm")+ggtitle("sepal.l
engthvspetal.length")+xlab("sepal.length")+ylab("petal.length")+these(legend.position="none")
```

OUTPUT:

Sepal.Length

0.87

Petal.Length

Sepal Length vs Petal Length

Petal Length

Sepal Length