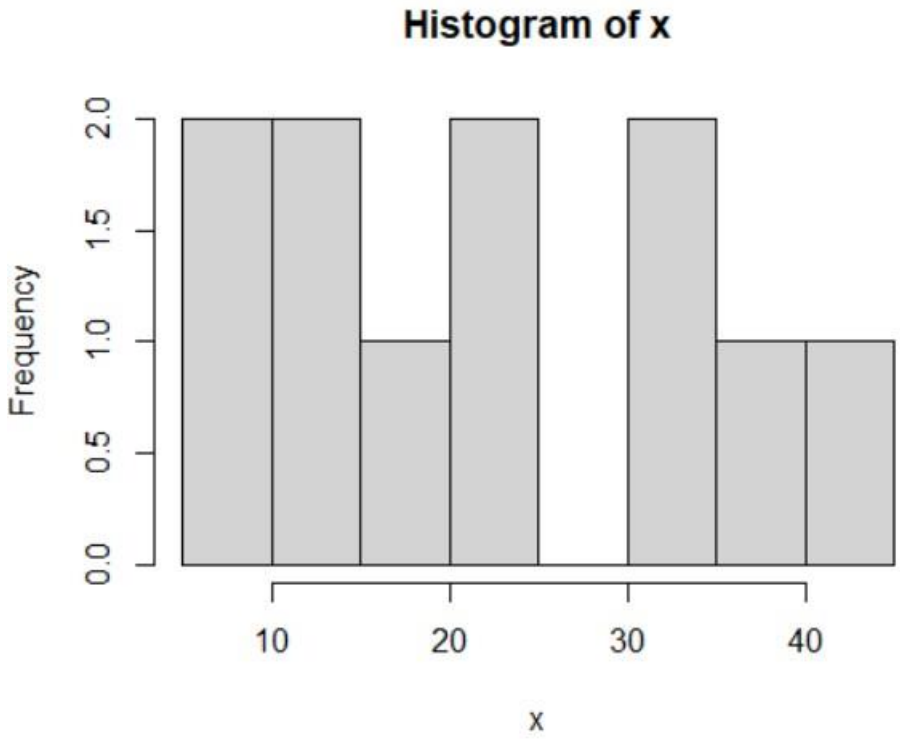
FDA
LAB-6

```
x<c(9,13,21,8,36,22,12,41,3
1,33,19)
hist(x)
```

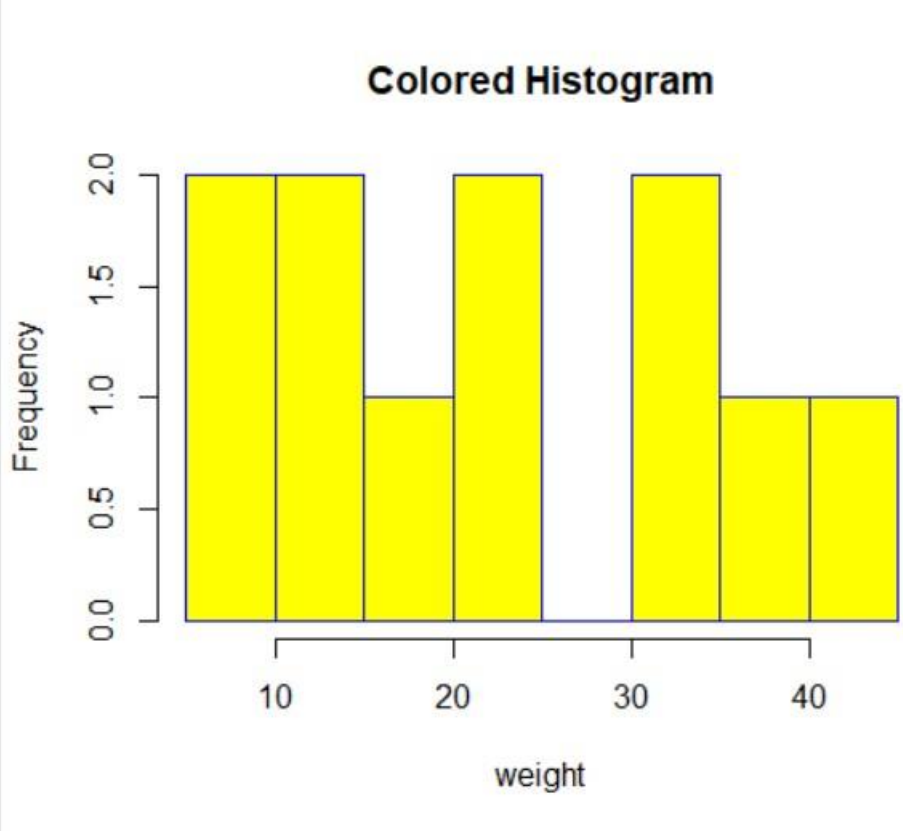
OUTPUT:



```
x<-c(9,13,21,8,36,22,12,41,31,33,19)
hist(x,xlab="weight",col="yellow",border="blue",main=
"Colored Histogram")
```

OUTPUT:

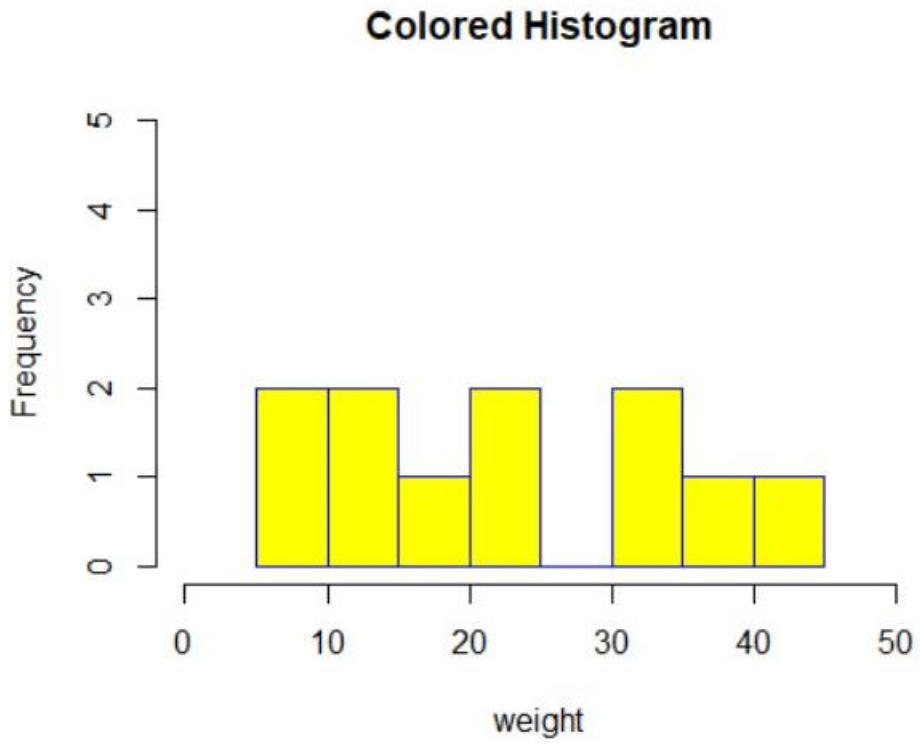
w



ith limits of x and y axis x<-

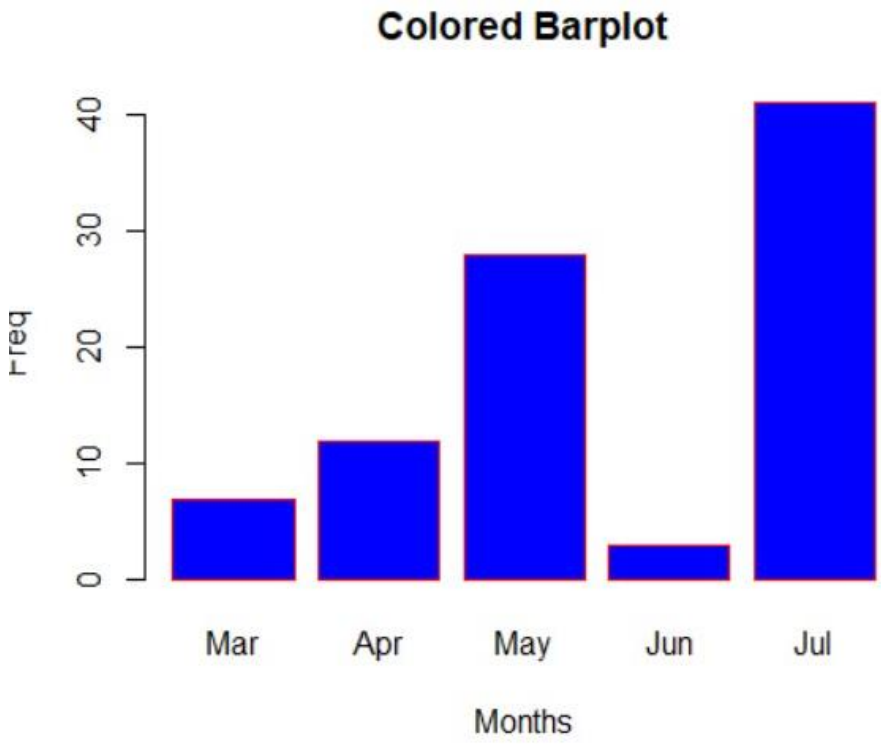
c(9,13,21,8,36,22,12,41,31,33,19)

hist(x,xlab="weight",col="yellow",border="blue",main="Colored Histogram", xlim=c(0,50), ylim=c(0,5)) OUTPUT:

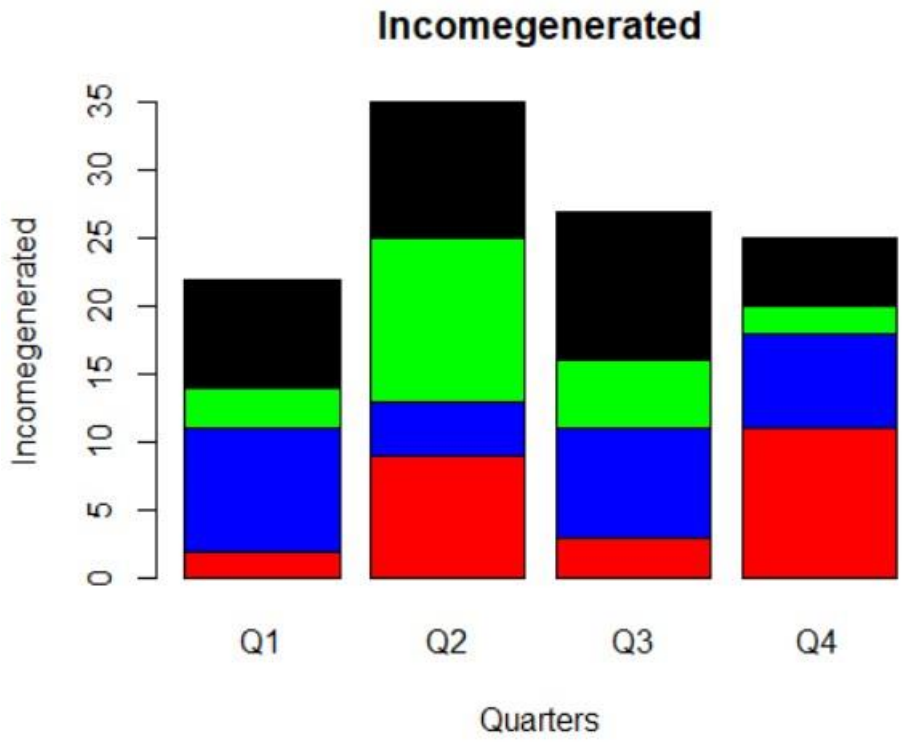



```
barchart x<-

c("Mar","Apr","May","Jun","Jul")

y<-c(7,12,28,3,41)

barplot(names.arg = x, y, main = "Colored Barplot", xlab = "Months",
ylab = "Freq", col = "blue", border = "red")
```

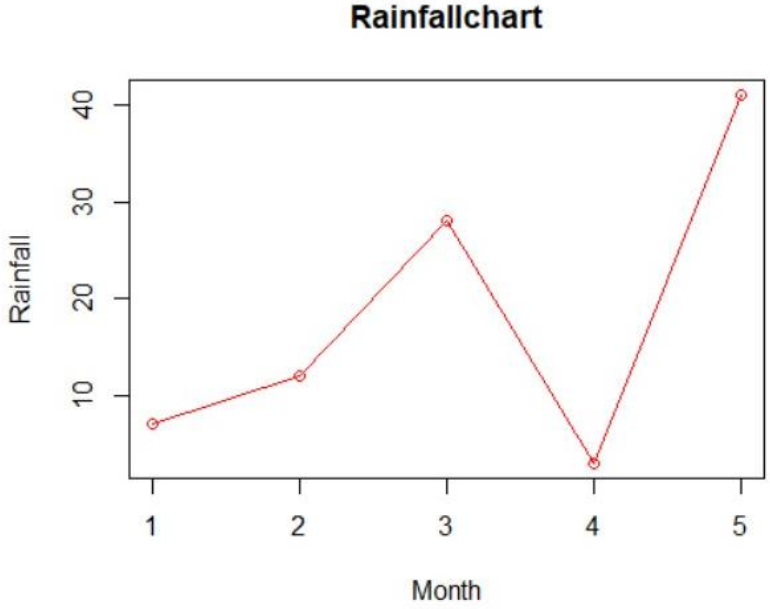
OUTPUT:



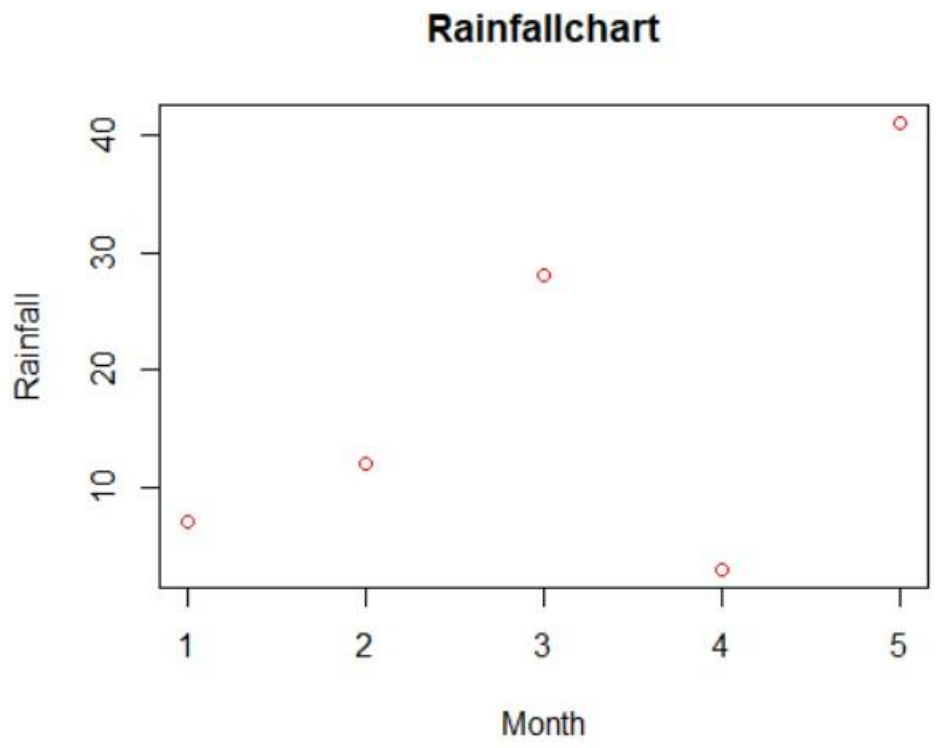

```
groupbarchart and stacked bar chart states<-

c("state1","state2","state3","state4") colors<-

c("red","blue","green","black") quarters<-

c("Q1","Q2","Q3","Q4")

Values<-
matrix(c(2,9,3,11,9,4,8,7,3,12,5,2,8,10,11,5),nrow=4,ncol=4,byrow=TRUE
)

barplot(Values,main="Incomegenerated",names.arg=quarters,xlab="Quarter
s",ylab="Incomege nerated",col=colors);

OUTPUT:
```



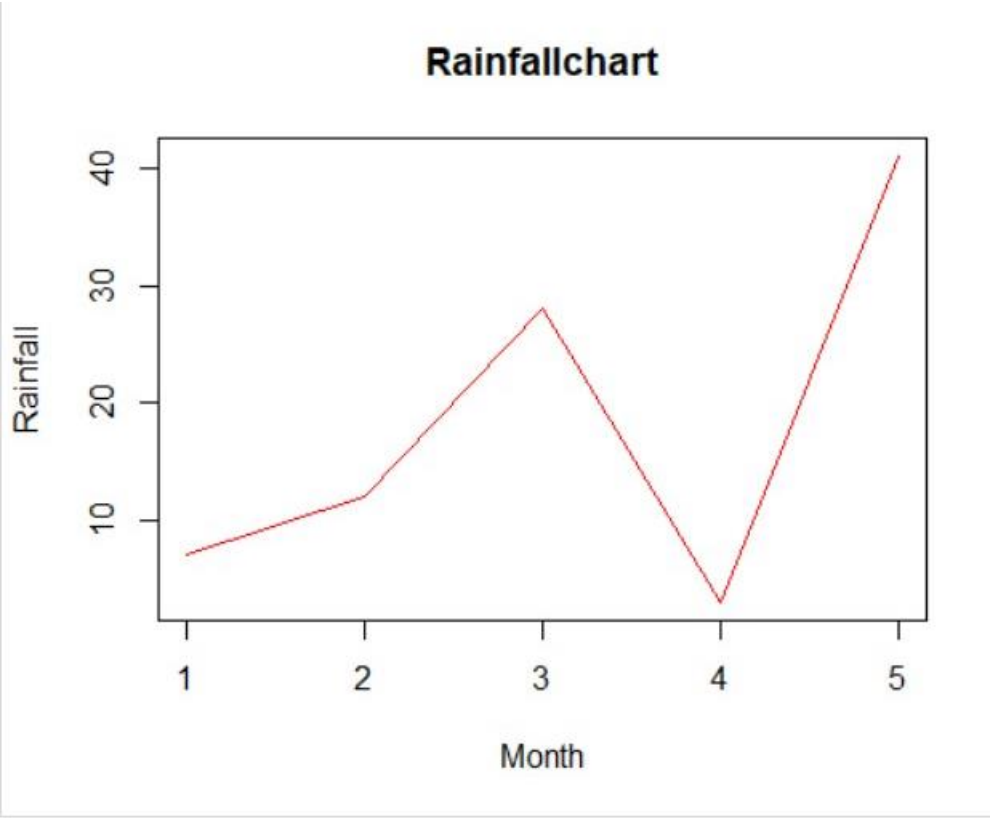
linegraph with points and lines x<-c(7,12,28,3,41) plot(x,type="o",col="red",xlab="Month",ylab="Rainfall ",main="Rainfallchart") OUTPUT:



```
linegrph with only points x<-c(7,12,28,3,41)
plot(x,type="p",col="red",xlab="Month",ylab="Rainfall
",main="Rainfallchart") OUTPUT:
```

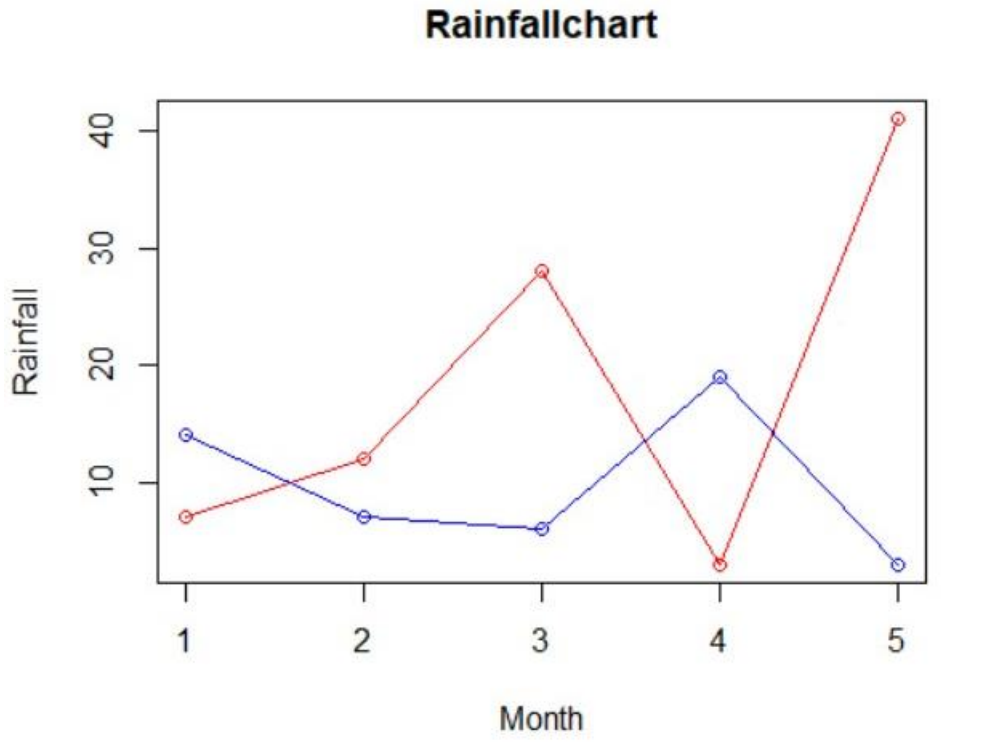



```
linegraph with only lines x<-c(7,12,28,3,41)
plot(x,type="l",col="red",xlab="Month",ylab="Rainfall
",main="Rainfallchart")
OUTPUT:
```




```
linegraph x1<-c(7,12,28,3,41) x2<-c(14,7,6,19,3)
plot(x1,type="o",col="red",xlab="Month",ylab="Rainfall
",main="Rainfallchart") lines(x2,type="o",col="blue")
```

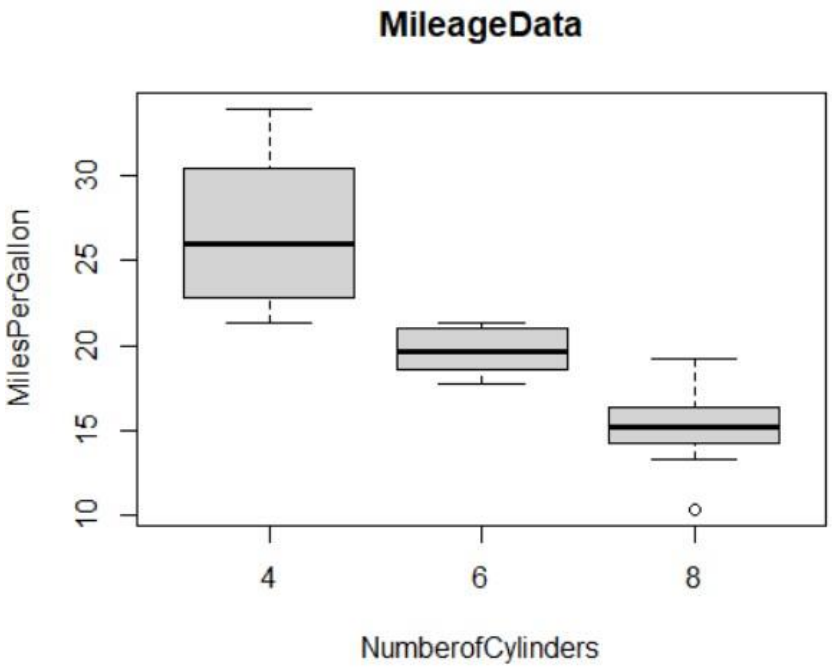
OUTPUT:



boxplot

```
boxplot(mpg~cyl,data=mtcars,xlab="NumberofCylinders",ylab="MilesPerGal
lon",main="Mileag eData")
```

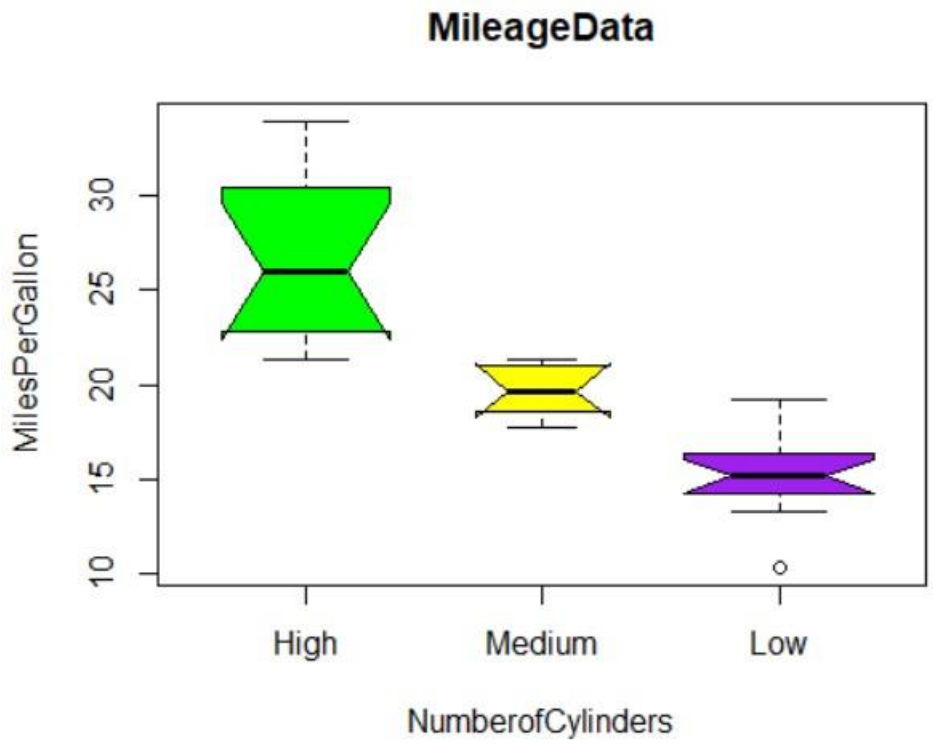
OUTPUT:



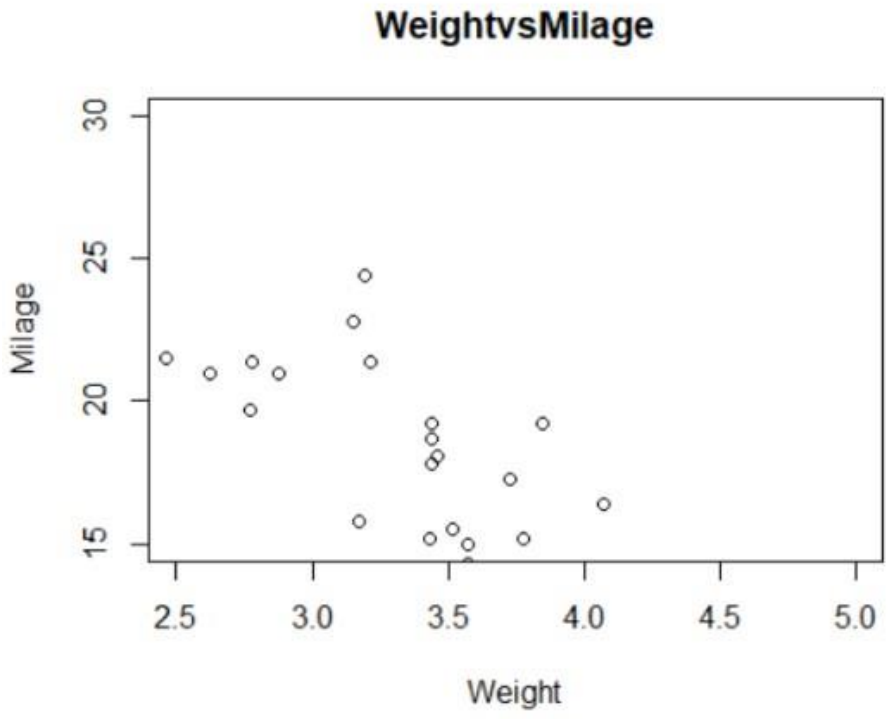
boxplot

```
boxplot(mpg~cyl,data=mtcars,xlab="NumberofCylinders",ylab="MilesPerGal
lon",main="Mileag
eData",notch=TRUE,varwidth=TRUE,col=c("green","yellow","purple"),names
=c("High","Medium ","Low"))
```

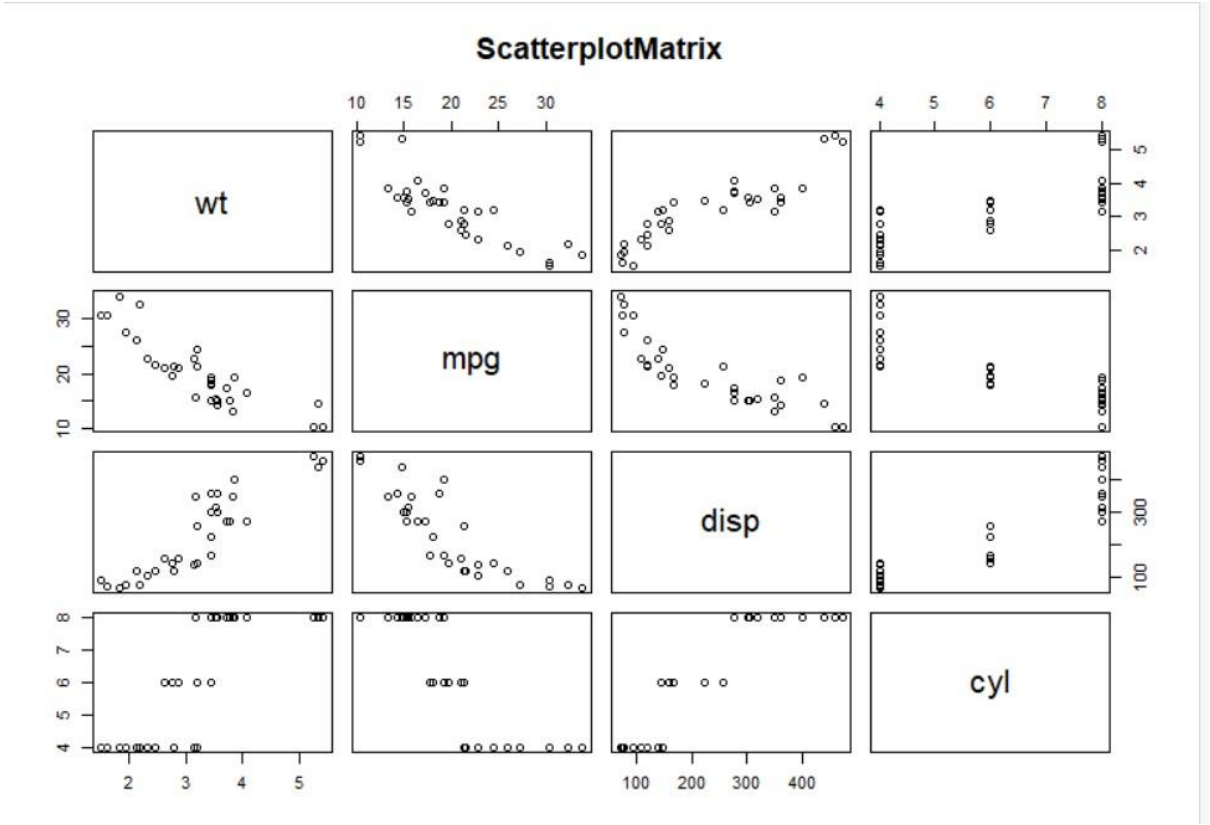
OUTPUT:



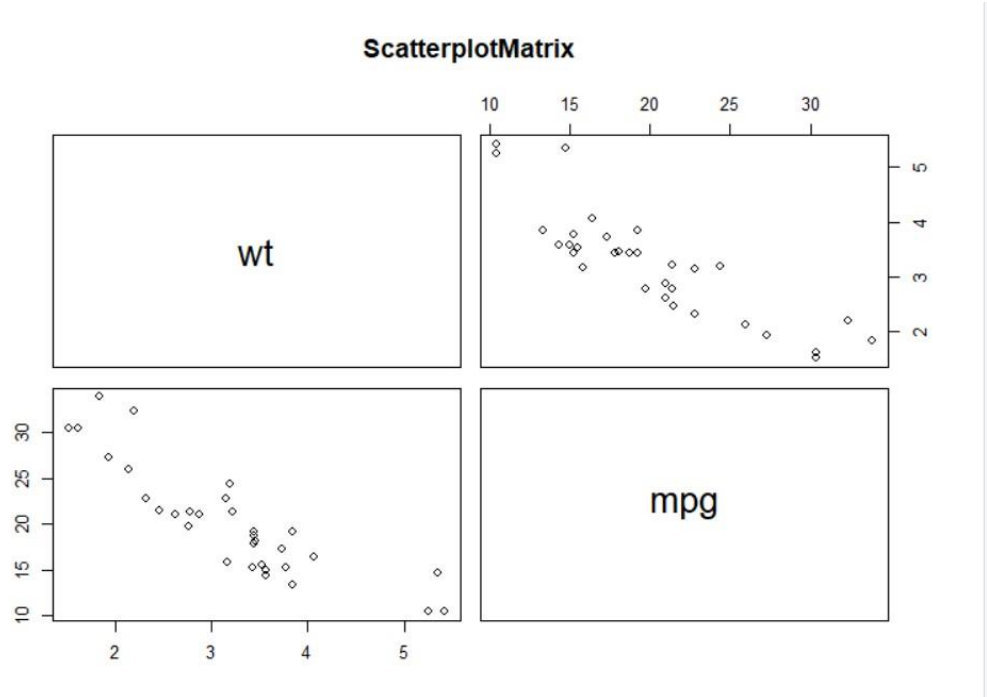

```
scatterplot input<-
mtcars[,c('wt','mpg') ]
plot(x=input$wt,y=input$mpg,xlab="Weight",ylab="Milage",xlim=c(2.5,5),
ylim=c(15,30),main=" WeightvsMilage") OUTPUT:
```



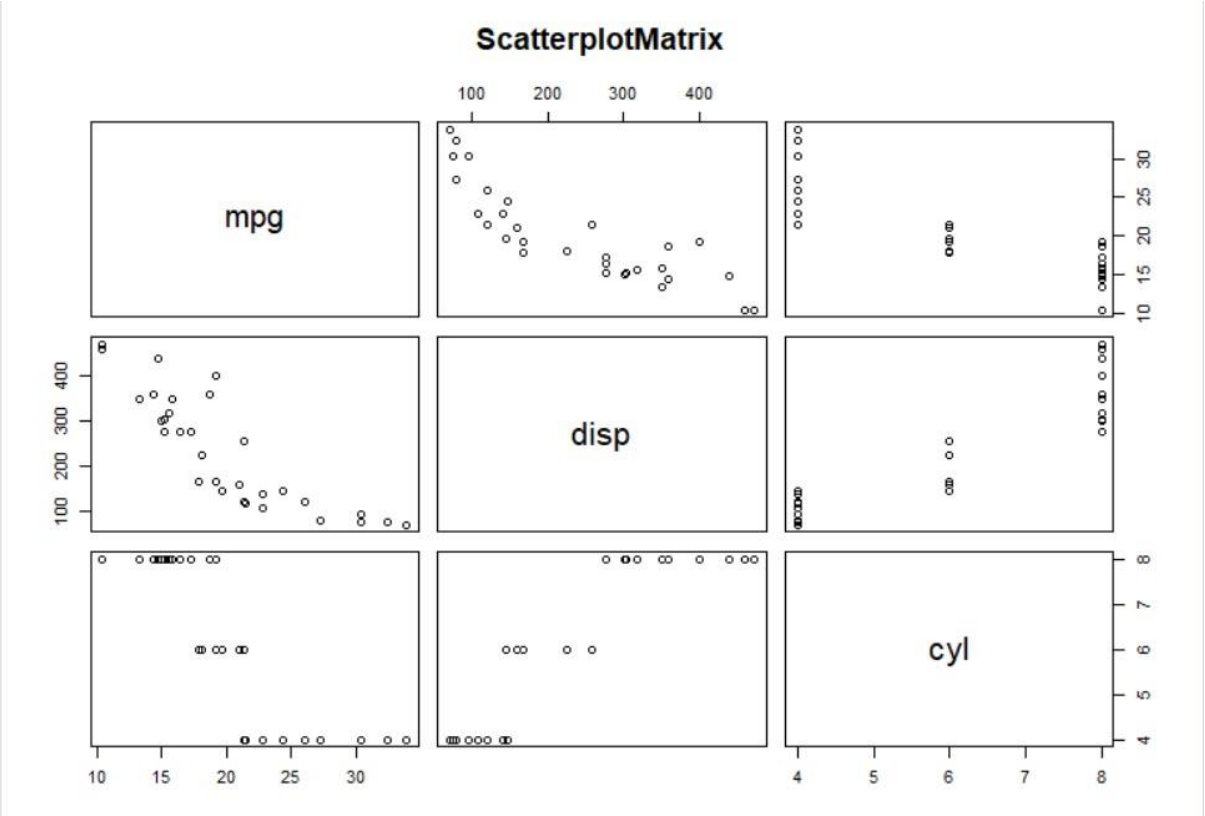
```
#scatterplotmatrices
pairs(~wt+mpg+disp+cyl,data=mtcars,main="Scatterplo
tMatrix") OUTPUT:
```



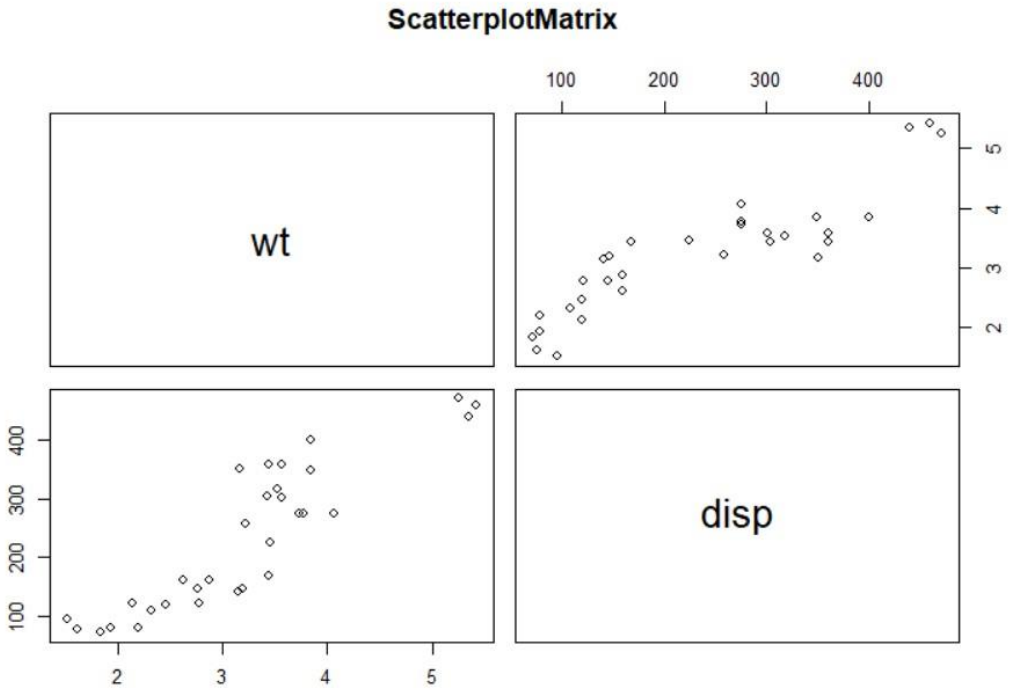

```
pairs(~wt+mpg,data=mtcars,main="ScatterplotMa
trix") OUTPUT:
```



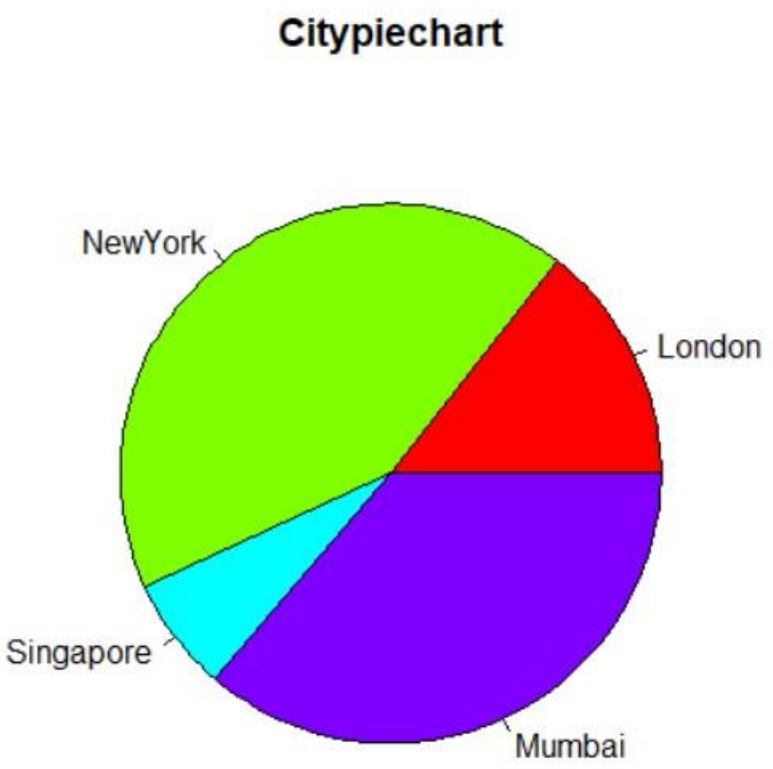
```
pairs(~mpg+disp+cyl,data=mtcars,main="Scatterplot
Matrix") OUTPUT:
```




```
pairs(~wt+disp,data=mtcars,main="ScatterplotM
atrix") OUTPUT:
```

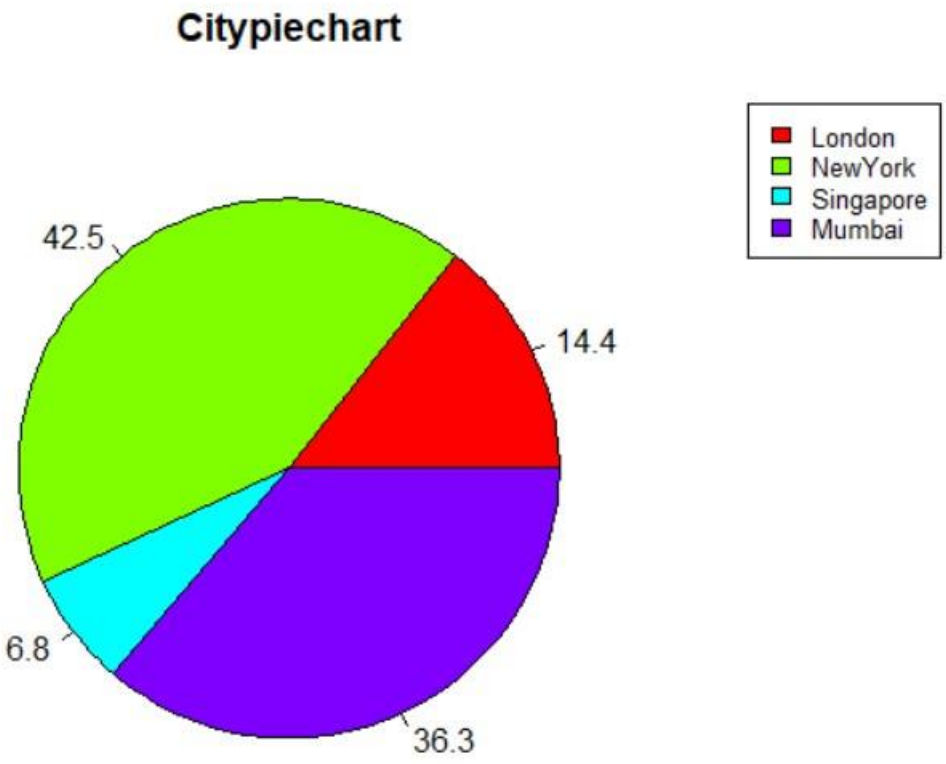


```
piechart x<-c(21,62,10,53) labels<-
c("London","NewYork","Singapore","Mumba
i")
pie(x,labels,main="Citypiechart",col=ra
inbow(length(x))) OUTPUT:
```




```
piechart x<-c(21,62,10,53) labels<-
c("London","NewYork","Singapore","Mumbai")
piepercent<-round(100*x/sum(x),1)
pie(x,labels=piepercent,main="Citypiechart",col
=rainbow(length(x)))
legend("topright",c("London","NewYork","Singapore","Mumbai"),cex=0.8,f
ill=rainbow(length(x)
))
```

OUTPUT:


Citypiechart
London
NewYork
Singapore
Mumbai
42.5
14.4
6.8
36.3