Lab3

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2. Boxplot

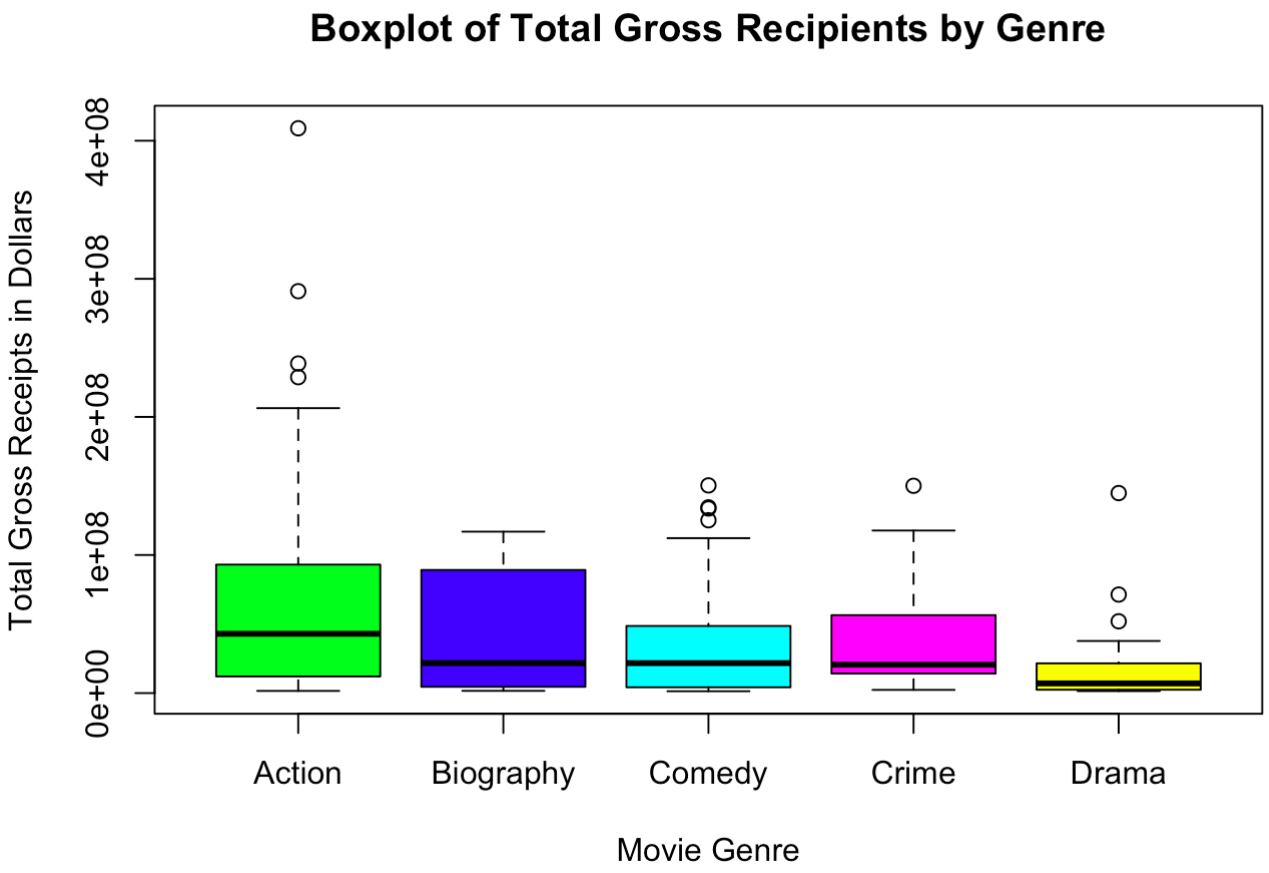
```
a1 <- read.csv("http://www.stat.ucla.edu/~vlew/datasets/bom_imdb.csv")
a2 <- subset(a1,genre == "Action"| genre == "Biography"| genre == "Comedy"| genre == "Cr
ime"|genre=="Drama")
levels(a2$genre)
```

```
##  [1] "Action"    "Adventure" "Animation" "Biography" "Comedy"
##  [6] "Crime"     "Drama"     "Horror"    "Music"     "Sci-Fi"
```

```
a2$genre <- droplevels(a2$genre)
levels(a2$genre)
```

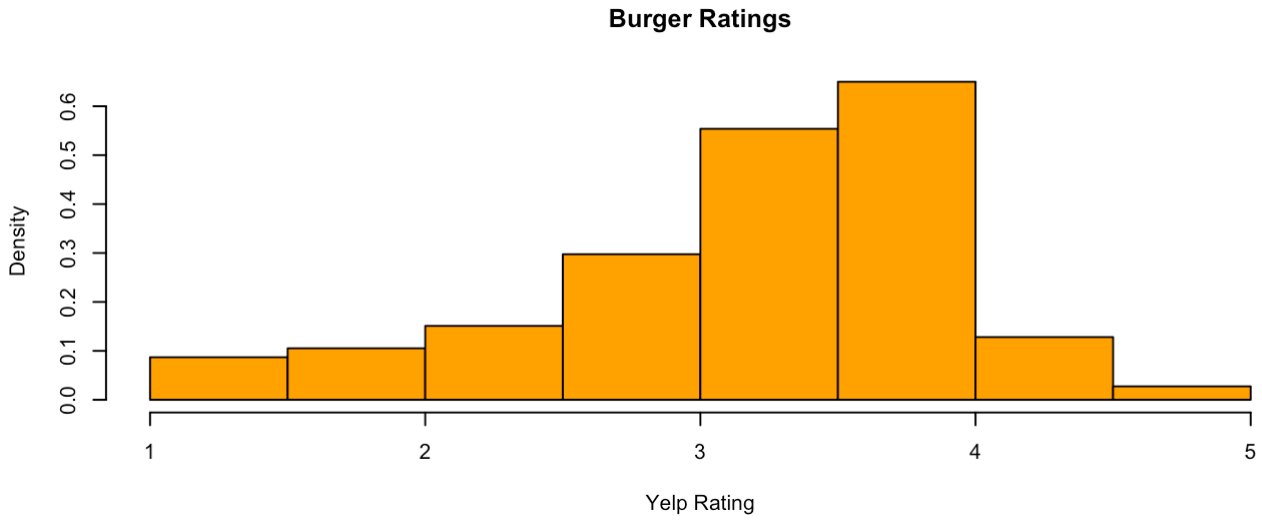
```
## [1] "Action"    "Biography" "Comedy"    "Crime"     "Drama"
```

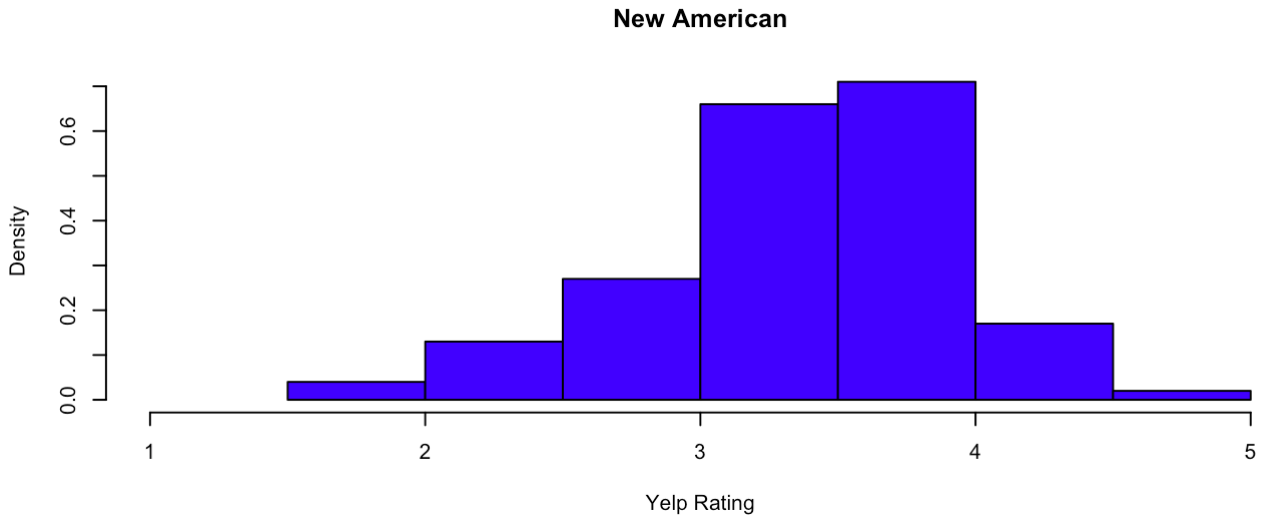
```
boxplot(a2$TotalGross ~ a2$genre,
col=c("green","blue","cyan","magenta","yellow"),main="Boxplot of Total Gross Recipients
 by Genre",ylab="Total Gross Receipts in Dollars",xlab="Movie Genre")
```

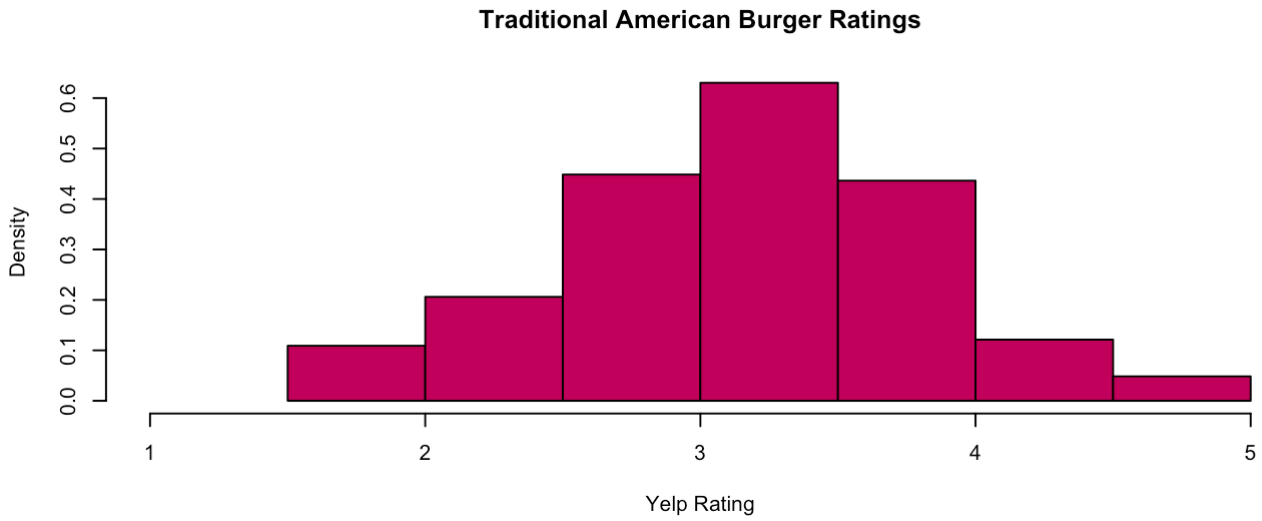


3. Histogram

```
b1 <- read.csv("http://www.stat.ucla.edu/~vlew/datasets/burgers.csv")
# head(b1)
# names(b1)
b2.1 <- subset(b1, b1$categories == "burgers")
b2.2 <- subset(b1, b1$categories == "newamerican")
b2.3 <- subset(b1, b1$categories == "tradamerican")
par(mfrow = c(3,1))
hist1 <- hist(b2.1$rating, freq = FALSE, col="orange",main="Burger Ratings",ylab="Densit
y",xlab = "Yelp Rating",xlim=c(1,5))
hist2 <- hist(b2.2$rating, freq = FALSE, col = "blue",main="New American",ylab="Density",x
ab = "Yelp Rating",xlim=c(1,5))
hist3 <- hist(b2.3$rating, freq = FALSE,  col = "maroon", main = "Traditional American B
urger Ratings", ylab = "Density", xlab = "Yelp Rating", xlim = c(1,5))
```

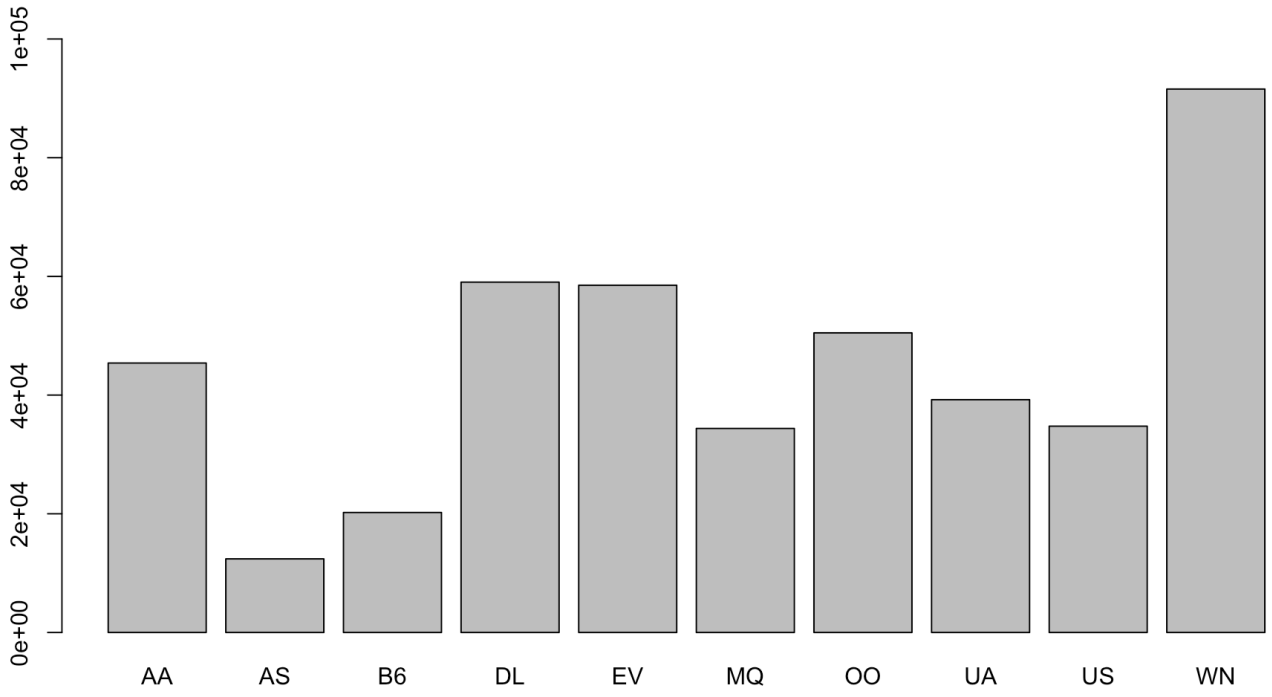




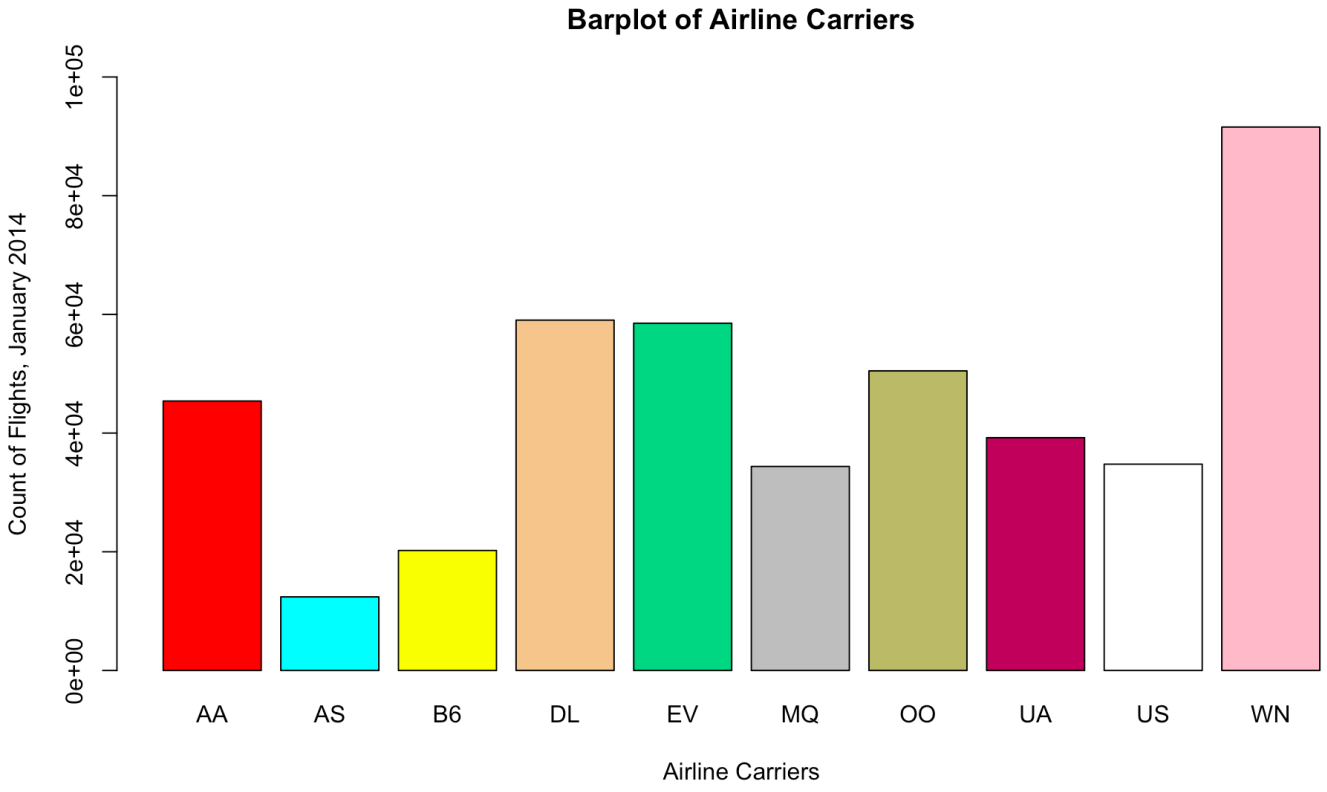


4.

```
c <- read.csv("http://www.stat.ucla.edu/~vlew/datasets/JANFLIGHTS.csv")
par(mfrow=c(1,1))
barplot(table(c$CARRIER),ylim=c(0,100000))
```



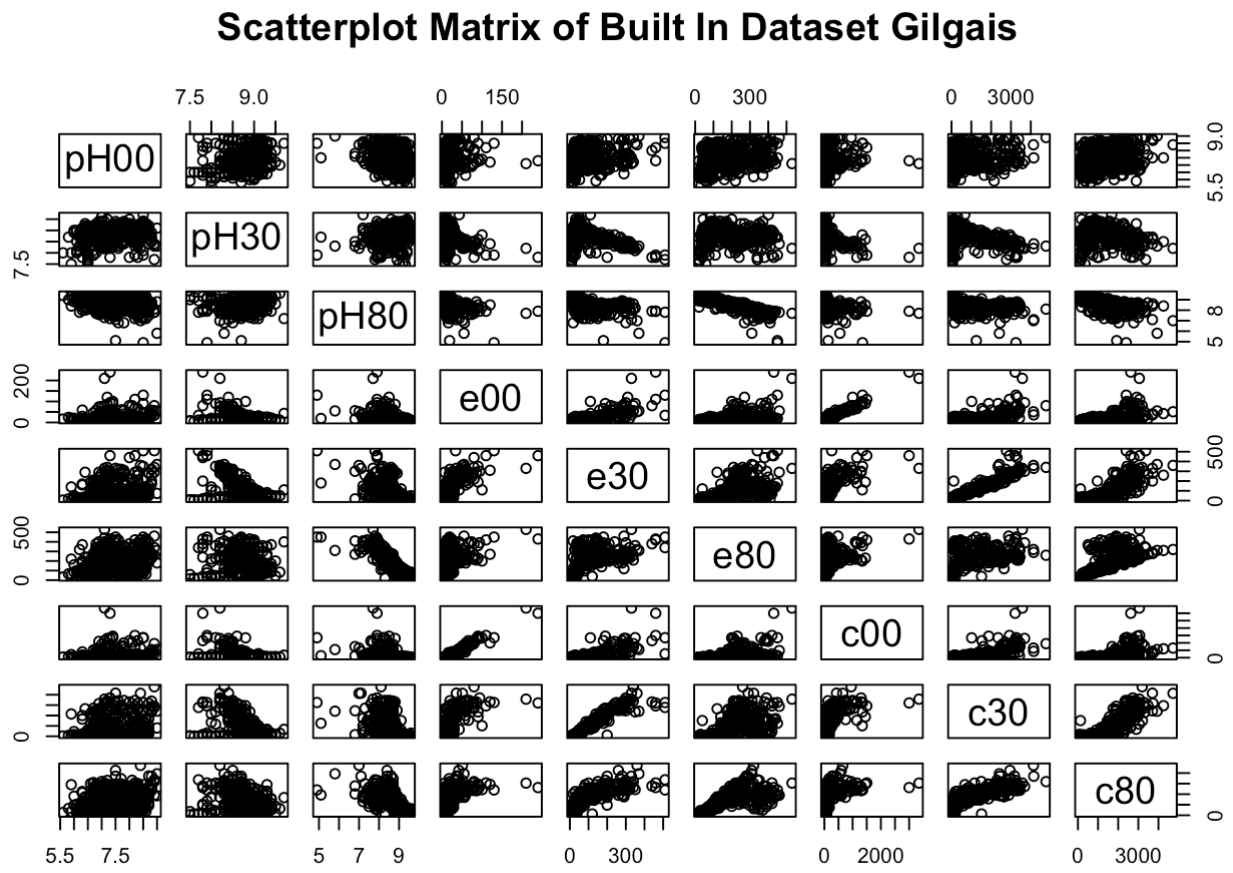

```
barplot(table(c$CARRIER),main="Barplot of Airline Carriers",xlab="Airline Carriers",ylab="
ount of Flights, January 2014",col=c("red","cyan","yellow","burlywood2", "seagreen3", "g
rey", "darkkhaki", "maroon", "white", "pink"),ylim=c(0,100000))
```



5.

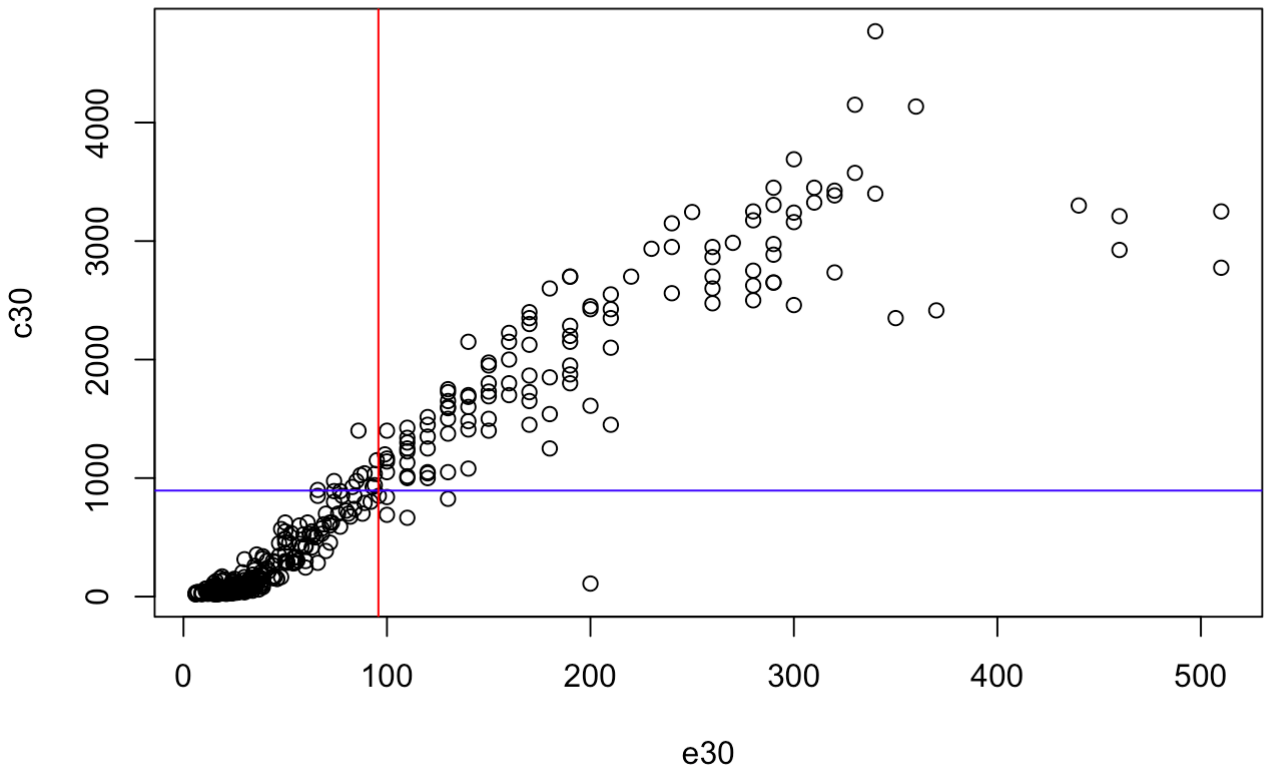
A.

```
library(MASS)
data("gilgais")
plot(gilgais,main="Scatterplot Matrix of Built In Dataset Gilgais")
```



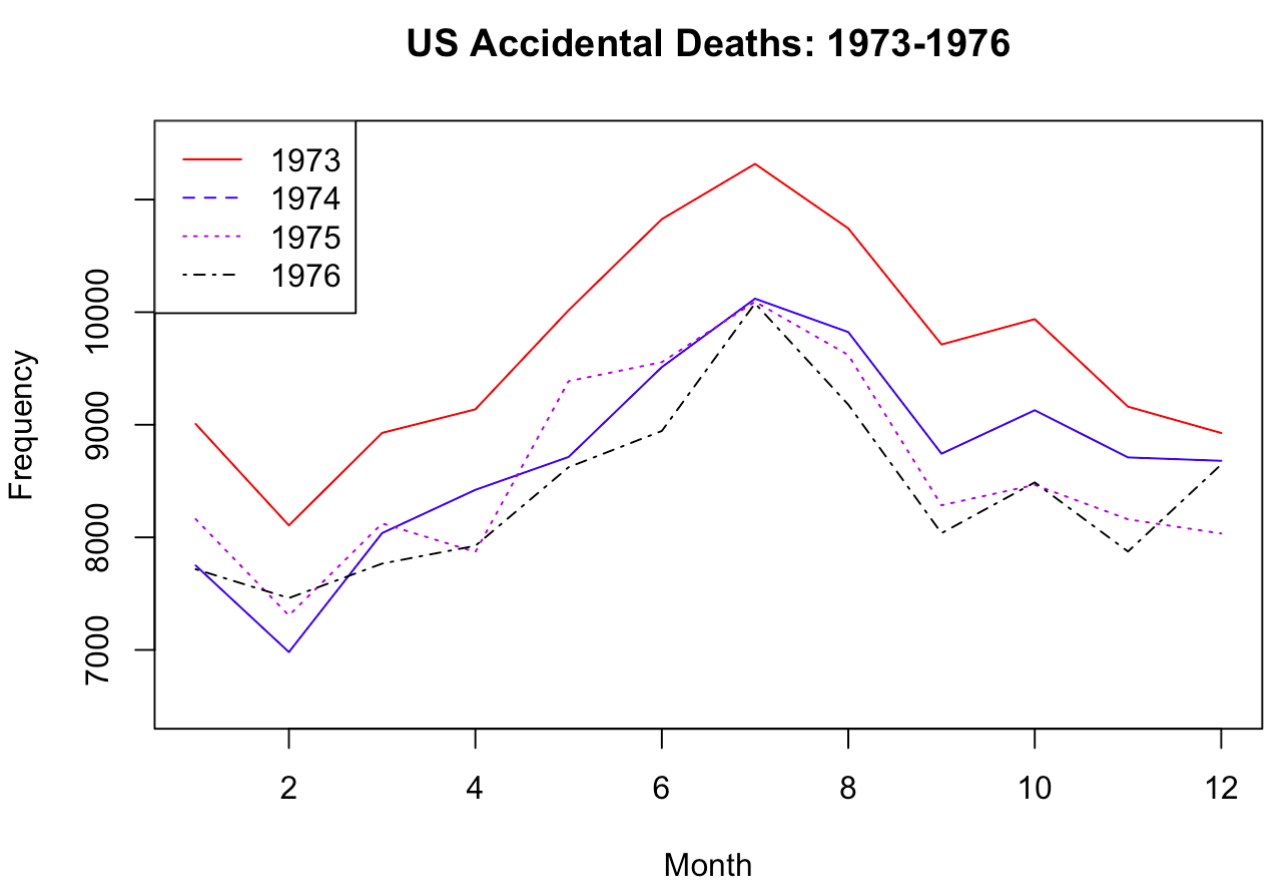
B.

```
plot(c30~e30,data=gilgais,main="Plot of Chloride Content to Eletrical Conductivity at 30
cm with means")
abline(h =mean(gilgais$c30),col="blue")
abline(v=mean(gilgais$e30),col="red")
```



6.

```
data(USAccDeaths)
c1 <- USAccDeaths
par(mfrow = c(1,1))
y1 <- c1[1:12]
y2 <- c1[13:24]
y3 <- c1[25:36]
y4 <- c1[37:48]
y5 <- c1[49:60]
y6 <- c1[61:72]
x <- 1:12
plot(x,y1,type="l",ylim=c(6500,11500),col="red",main="US Accidental Deaths: 1973-1976",x
lab="Month",ylab="Frequency")
lines(x, y2, col="blue", lty=1)
lines(x, y3, col="purple", lty=3)
lines(x, y4, col="black", lty=4)
legend(0.56,11700,c("1973","1974","1975","1976"),lty=c(1,2,3,4),col=c("red","blue","purp
le","black"))
```


US Accidental Deaths: 1973-1976
1973
1974
1975
1976
Frequency
7000
8000
9000
10000
2
4
6
8
10
12
Month