Assignment 1, Setting Up R

By Jeremy Glasgow

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```r
# 1
# install.packages("ISLR")
```

```r
# 2
library("ISLR")
data(Carseats)
summary(Carseats)
```

```
##      Sales          CompPrice       Income        Advertising
##  Min.   : 0.000   Min.   : 77   Min.   : 21.00   Min.   : 0.000
##  1st Qu.: 5.390   1st Qu.:115   1st Qu.: 42.75   1st Qu.: 0.000
##  Median : 7.490   Median :125   Median : 69.00   Median : 5.000
##  Mean   : 7.496   Mean   :125   Mean   : 68.66   Mean   : 6.635
##  3rd Qu.: 9.320   3rd Qu.:135   3rd Qu.: 91.00   3rd Qu.:12.000
##  Max.   :16.270   Max.   :175   Max.   :120.00   Max.   :29.000
##    Population        Price         ShelveLoc        Age          Education
##  Min.   : 10.0   Min.   : 24.0   Bad   : 96   Min.   :25.00   Min.   :10.0
##  1st Qu.:139.0   1st Qu.:100.0   Good  : 85   1st Qu.:39.75   1st Qu.:12.0
##  Median :272.0   Median :117.0   Medium:219   Median :54.50   Median :14.0
##  Mean   :264.8   Mean   :115.8                Mean   :53.32   Mean   :13.9
##  3rd Qu.:398.5   3rd Qu.:131.0                3rd Qu.:66.00   3rd Qu.:16.0
##  Max.   :509.0   Max.   :191.0                Max.   :80.00   Max.   :18.0
##  Urban        US
##  No :118   No :142
##  Yes:282   Yes:258
##
##
##
##
```

```r
cat("Number of rows in the Carseats dataset: ", nrow(Carseats))
```

```
## Number of rows in the Carseats dataset:  400
```
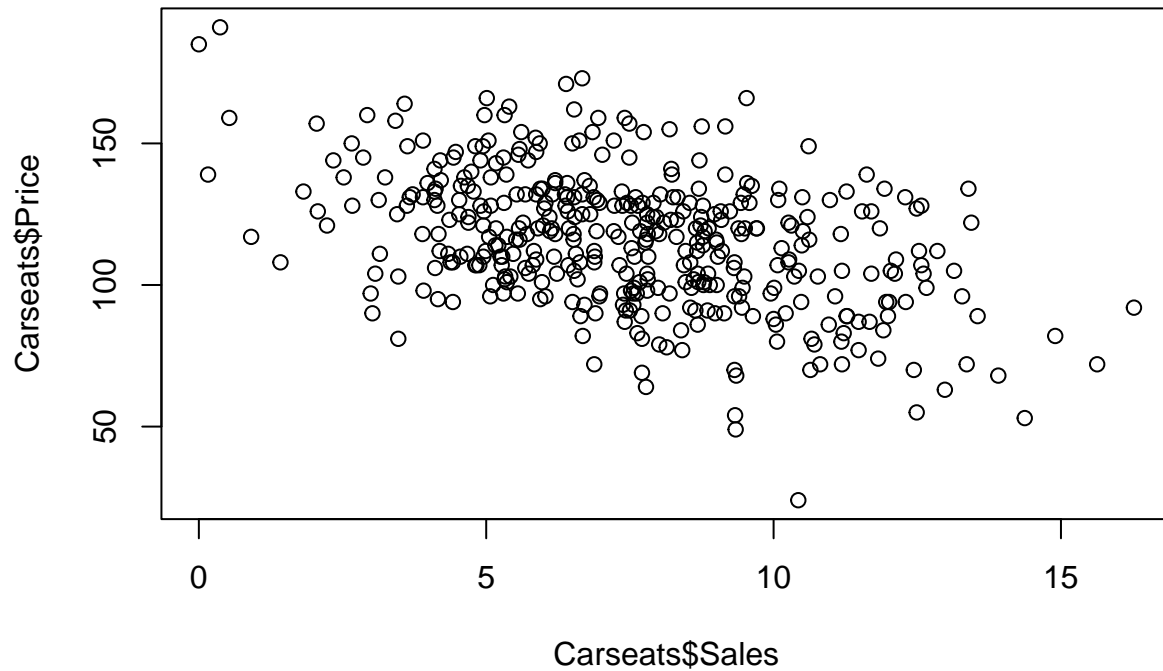
```r
# 3
cat("Max advertising attribute: ", max(Carseats$Advertising))
```

```
## Max advertising attribute:  29
```

```r
# 4
cat ("IQR of Price attribute: ", IQR(Carseats$Price))
```

```
## IQR of Price attribute:  31
```

```
# 5
plot(Carseats$Sales, Carseats$Price)
```



```
cat("Plotting Sales vs Price suggests a slight negative correlation between the two variables.")
```

Plotting Sales vs Price suggests a slight negative correlation between the two variables.

```
cat("The correlation coefficient of Sales vs Price is: ", cor(Carseats$Sales, Carseats$Price), "\n")
```

The correlation coefficient of Sales vs Price is: -0.4449507

```
cat("The correlation coefficient suggests a moderate negative correlation. ")
```

The correlation coefficient suggests a moderate negative correlation.