Assignment 1

Harika

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```
library(ISLR)
```

```
### The above syntax is used to call the library named "ISLR".
```

```
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
##
##
##
##
```

```
### The above values represent the summary for the 'Carseats' dataset.
### This dataset contains a total of 400 observations.
```

```
max(Carseats$Advertising)
```

```
## [1] 29
```

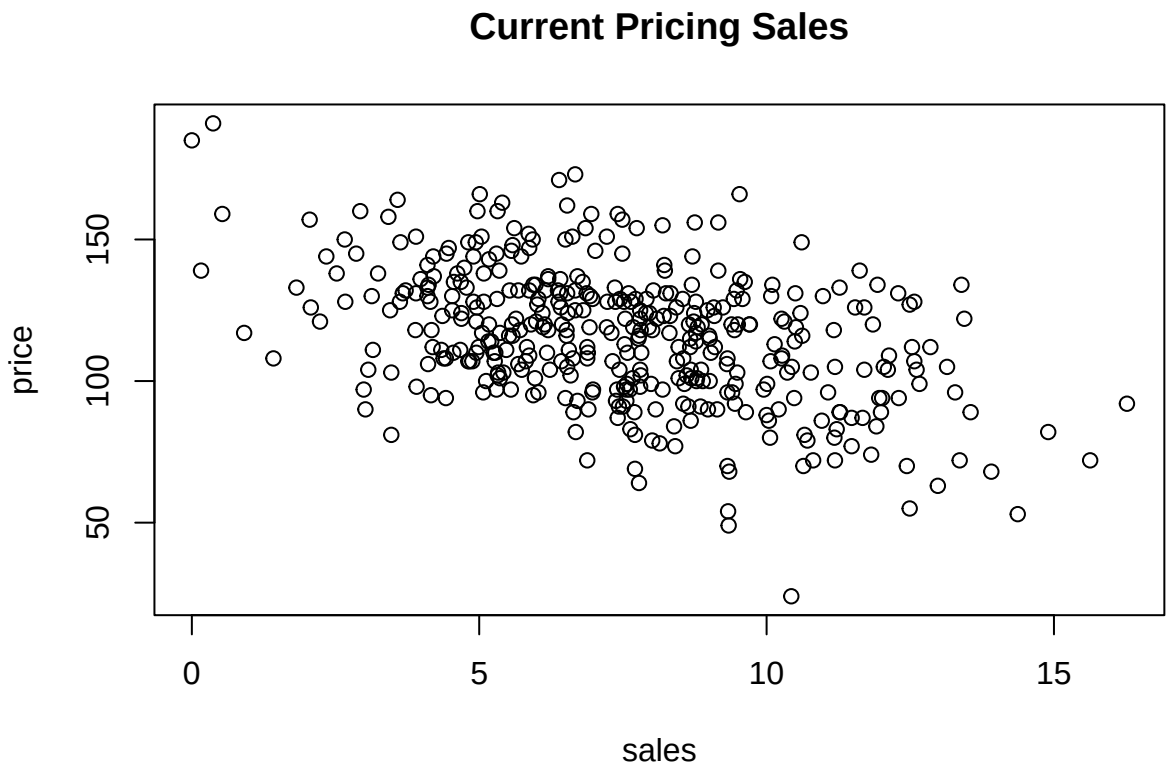
```
### The above value represents the maximum value of the advertising attribute.
```

```r
IQR(Carseats$Price)
```

```
## [1] 31
```

```r
### The above value represents the Interquartile Range for Price attribute.
```

```r
plot(Carseats$Sales,Carseats$Price, main = "Current Pricing Sales", xlab="sales" , ylab="price")
```




```r
### The above is the representation of scatter plot for sales against price from the Carseats dataset.
```

```r
correlation <- cor.test(Carseats$Sales,Carseats$Price,method = "pearson")
correlation
```

```
##
##  Pearson's product-moment correlation
##
## data:  Carseats$Sales and Carseats$Price
## t = -9.912, df = 398, p-value < 2.2e-16
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
##  -0.5203026 -0.3627240
## sample estimates:
##        cor
## -0.4449507
```

```
### The above value is the Pearson Correlation coefficient for the Sales and Price attributes, represen
```