

# Business Analytics Assignment 1

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```
# ISLR package has been installed so calling the ISLR library
library(ISLR)
# Displaying the Car Dataset.
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      ShelfLoc      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
##
##
##
##
```

```
# Displaying No. Of Records in the Dataset
nrow(Carseats)
```

```
## [1] 400
```

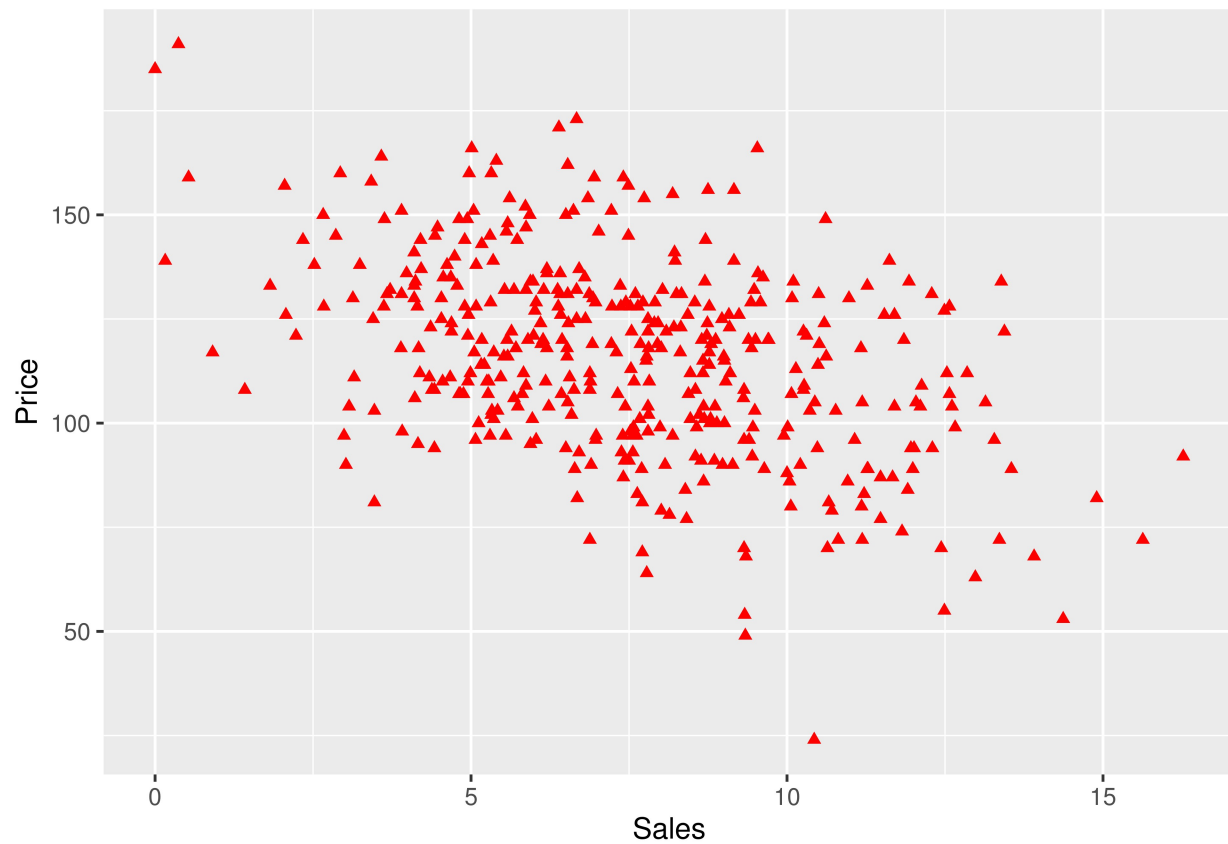
```
# Displaying the Maximum value of the Advertising attribute
max(Carseats$Advertising)
```

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

```
# Calculating the IQR of the prices attribute
IQR(Carseats$Price)
```

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

```
# Plotting a graph between Sales and Prices (X = Sales, Y = Price)
library(ggplot2)
ggplot(Carseats) +aes(
  x = Sales,
  y = Price ) +
geom_point(shape ="triangle", size =1.5, colour ="red")
```



```
# Correlation value of the sales and prices is Negative
cor(Carseats$Sales, Carseats$Price)
```

```
## [1] -0.4449507
```