

## Business Analytics Assignment\_1 Venkata Naga Siddartha Gutha

```
library(ISLR)
#Using Carseats dataset
#summary of 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      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
##
##
##
##
```

```
#number of observations in the carseats dataset
nrow(Carseats)
```

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

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

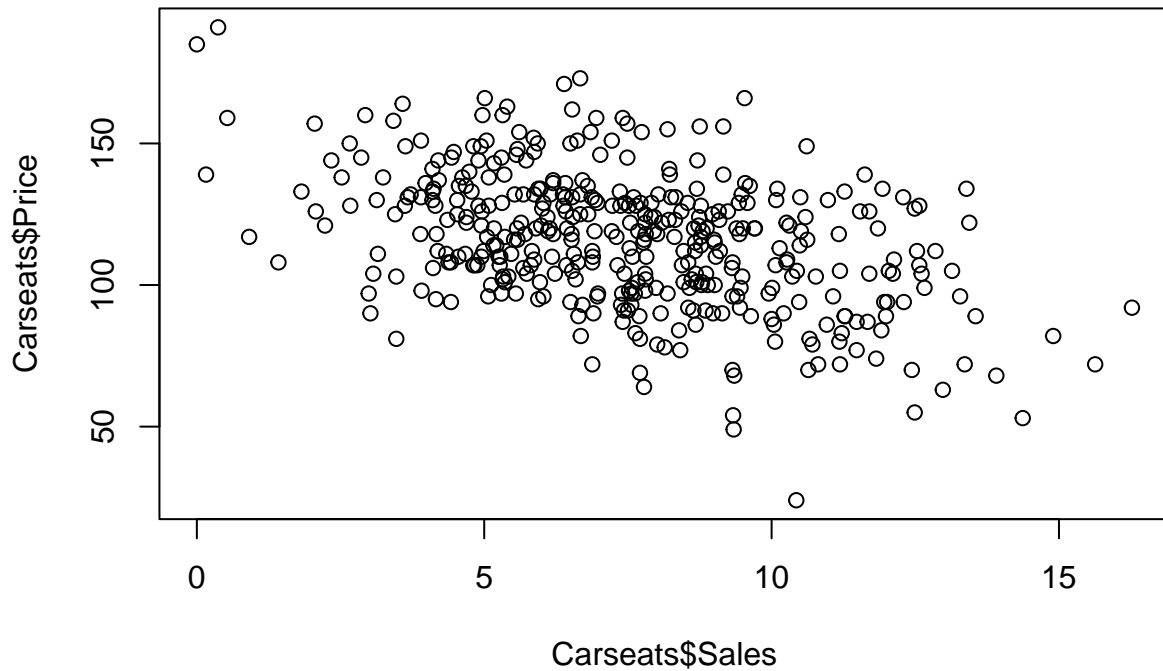
```
## [1] 29
```

```
#IQR of the price attribute
IQR(Carseats$Price)
```

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

```
#ploting sales against price
```

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



```
##in the graph it can be seen that sales increases as the price decreases
```

```
#calculating the corelation of sales and price
```

```
cor(Carseats$Sales,Carseats$Price,method='pearson')
```

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

```
# value of corelation of sales and price is -0.4449. This shows that both the attributeS are inversely
```