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title: “R Notebook” output: html_document: df_print: paged

```
#Loading ISLR Package

library(ISLR)
#Summary of Car seats
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
##
##
##
##
```

```
# No.of rows in dataset
print(paste("no. of rows in dataset:",nrow(Carseats)))
```

```
## [1] "no. of rows in dataset: 400"
```

```
# Max value in advertising
print(paste("Max value of Advertising attribute:",max(Carseats$Advertising)))
```

```
## [1] "Max value of Advertising attribute: 29"
```

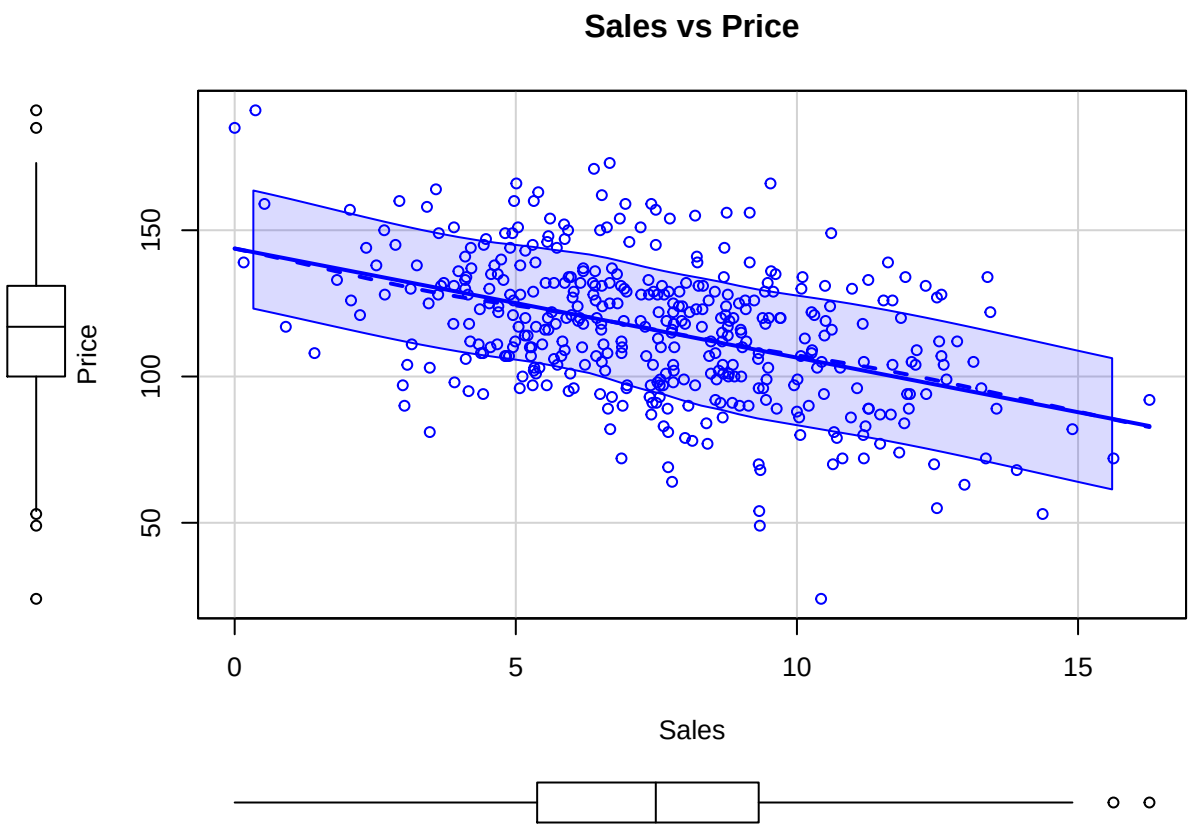
```
# IQR Value
print(paste("IQR value of Price attribute:",IQR(Carseats$Price)))
```

```
## [1] "IQR value of Price attribute: 31"
```

```
# Loading car package for scatterplot
library(car)
```

```
## Loading required package: carData
```

```r
# Scatterplotting sales vs price
scatterplot(Price ~ Sales, data=Carseats, xlab='Sales', ylab='Price', main='Sales vs Price')
```




```r
# Correlation between Sales and price
cor(Carseats$Sale,Carseats$Price)
```

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

Here, from the plot we notice that, as the Price of the Carseats are increasing the sales are decreasing. From the above we calculated the correlation of Price and Sales of the Carseats. We notice that the correlation between the two is a negative moderate linear correlation.