Business Analytics - Assignment -1

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```
#Question - 1
#Install the ISLR library using the command
#install.packages(ISLR)

#Question -2
#Calling the ISLR library, summary of carseats and finding the number of rows
library(ISLR)
summary(Carseats)
## Sales CompPrice Income Advertising
```

```
: 0.000
                            : 77
                                          : 21.00
   Min.
                     Min.
                                   Min.
                                                            : 0.000
   1st Qu.: 5.390
                     1st Qu.:115
                                   1st Qu.: 42.75
                                                     1st Qu.: 0.000
                                   Median : 69.00
   Median : 7.490
                     Median :125
                                                    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
           :16.270
                            :175
                                           :120.00
                                                            :29.000
##
   Max.
                     Max.
                                   Max.
                                                    Max.
      Population
                        Price
                                     ShelveLoc
                                                                    Education
##
                                                       Age
                                           : 96
           : 10.0
                           : 24.0
                                                                         :10.0
##
   Min.
                    Min.
                                    Bad
                                                 Min.
                                                        :25.00
                                                                  Min.
   1st Qu.:139.0
                                    Good : 85
                                                                  1st Qu.:12.0
                    1st Qu.:100.0
                                                 1st Qu.:39.75
##
   Median :272.0
                    Median :117.0
                                                 Median :54.50
                                    Medium:219
                                                                  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
##
          :509.0
                    Max.
   Max.
                           :191.0
                                                 Max.
                                                         :80.00
                                                                  Max.
                                                                         :18.0
##
   Urban
                US
##
   No :118
              No :142
##
   Yes:282
##
              Yes:258
##
##
##
##
```

```
nrow(Carseats)
```

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

```
# The carseats dataset has 400 rows.
```

```
# Question -3
# Finding the maxminum value of Advertising attribute.
max(Carseats$Advertising)
```

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

#Advertising attribute has 29 as its maxmimum value.

```
#Question - 4
# Finding the IQR value of price attribute
IQR(Carseats$Price)
```

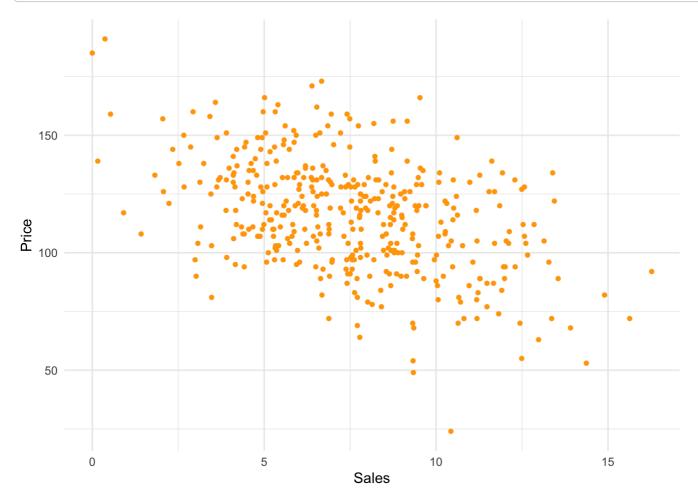
```
## [1] 31
```

#Price Attribute has 31 as its IQR value

```
#Question - 5
#Ploting the Sales over price and finding the correlation.

library(ggplot2)

ggplot(Carseats)+
   aes(
     x=Sales,
     y=Price
)+
   geom_point(shape="circle", size = 1.2, colour="orange")+
   theme_minimal()
```



#Customers are more likely to purchase lower-priced car seats since there is no correlation b etween the number of units scored and the price of the seats.