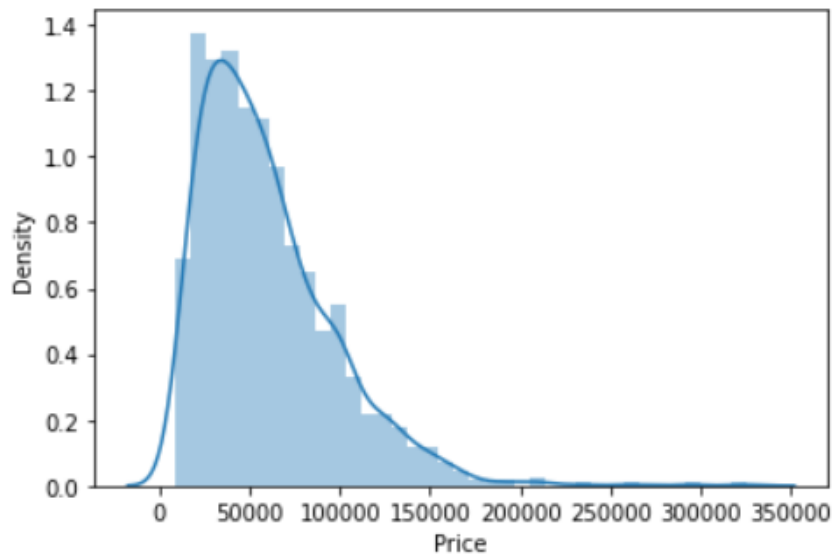


# **Laptop Price Predictor**

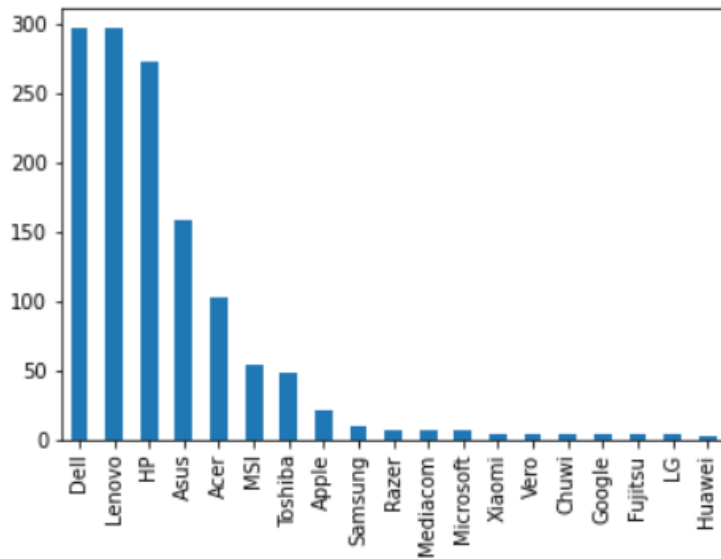
## **Data Analysis Report**



**Distribution plot for 'Price' column.**

**Observation:-**

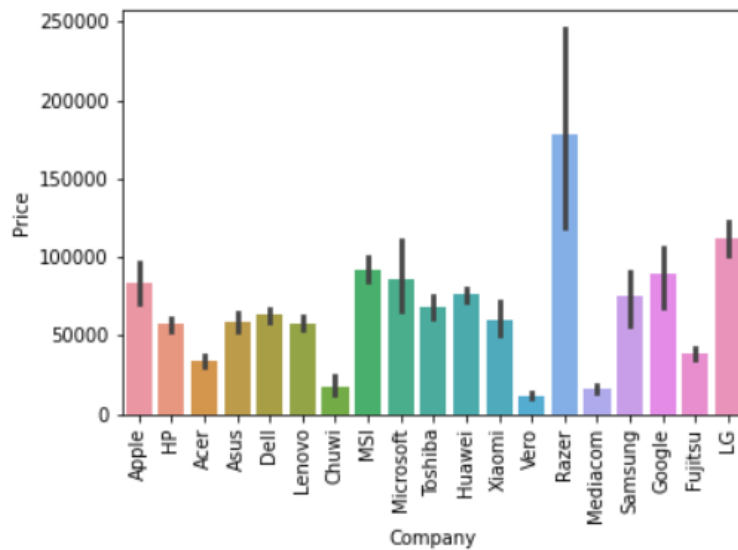
- The data is right skewed.
  - More number of laptops have low price and less number of laptops have high price.
-



**Bar graph for number of laptop for each company.**

**Observation:-**

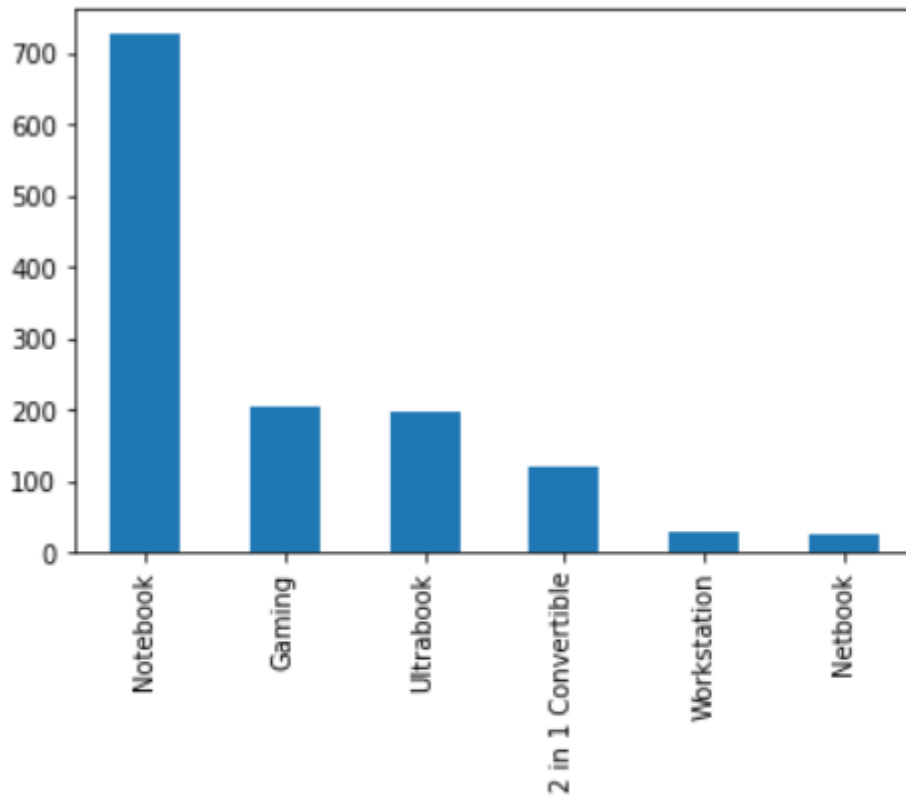
- Top 5 company's having maximum number of laptops :- Dell, Lenovo, HP, Asus, Acer.
- Total 86.64% of laptops are from these 5 companies.
- Companies having less than 5 laptops :- Xiaomi, Vero, Chuwi, Google, Fujitsu, LG, Huawei



**Bar graph 'Company' VS 'Price'.**

**Observation:-**

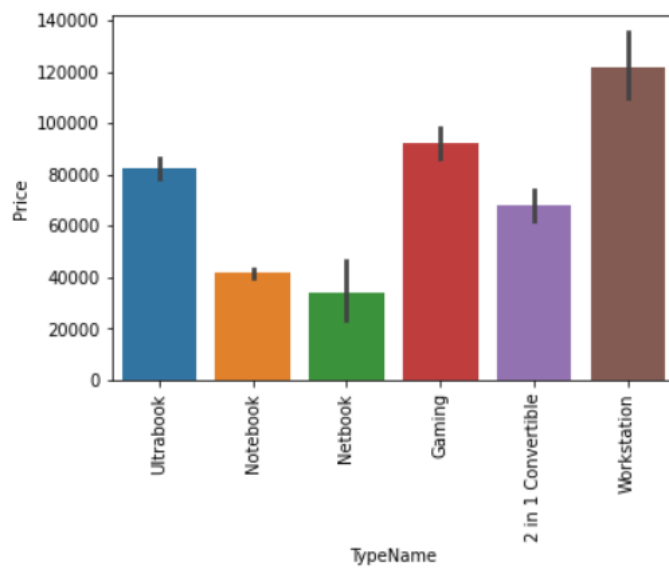
- Top 5 companies with maximum average price of laptops are :- Razor, LG, MSI, Google, Microsoft.
- Laptops with similar average budgeted price :- HP, Asus, Dell, Lenovo, Xiaomi
- Price variation can be seen for different companies.



**Bar graph for different types of laptops.**

**Observation:-**

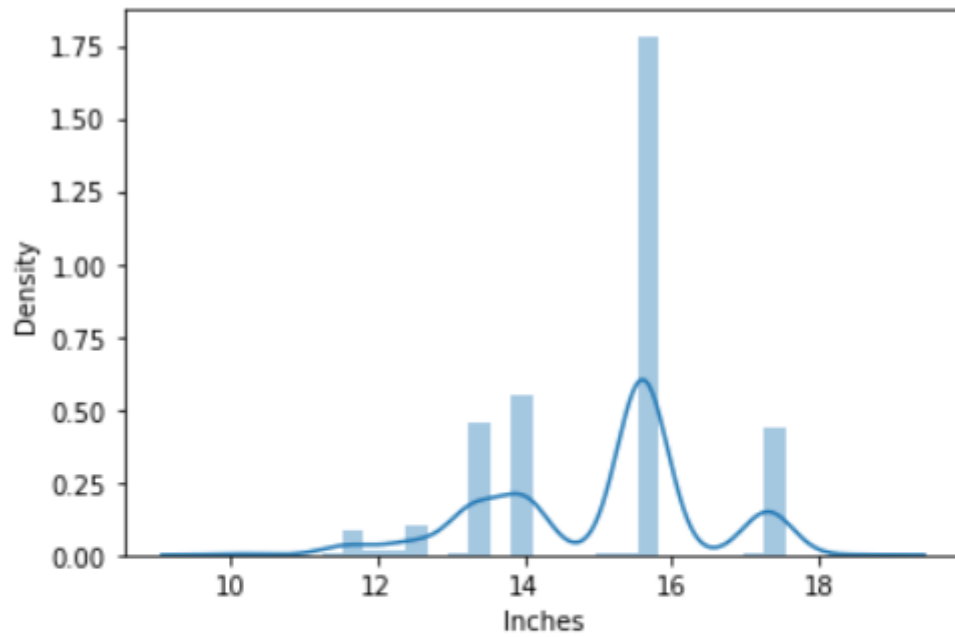
- There are total 6 types of laptops.
  - Maximum laptops are of Notebook type.
  - Workstation and Netbook type laptops are least in numbers.
-



**Bar graph 'TypeName' VS 'Price'**

**Observation:-**

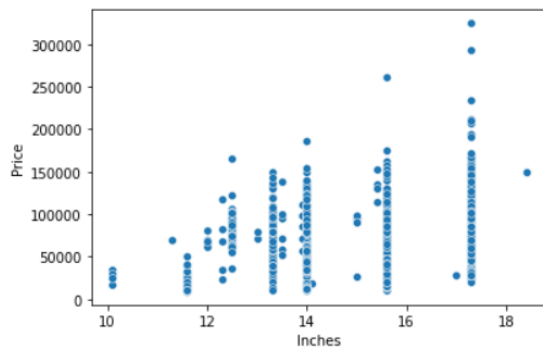
- Top 3 most expensive type of laptops are :- Workstation, Gaming, Ultrabook with price greater than Rs 80000.
  - Type of laptop is affecting the price of laptop.
-



**Distribution plot for Inches column.**

**Observation:-**

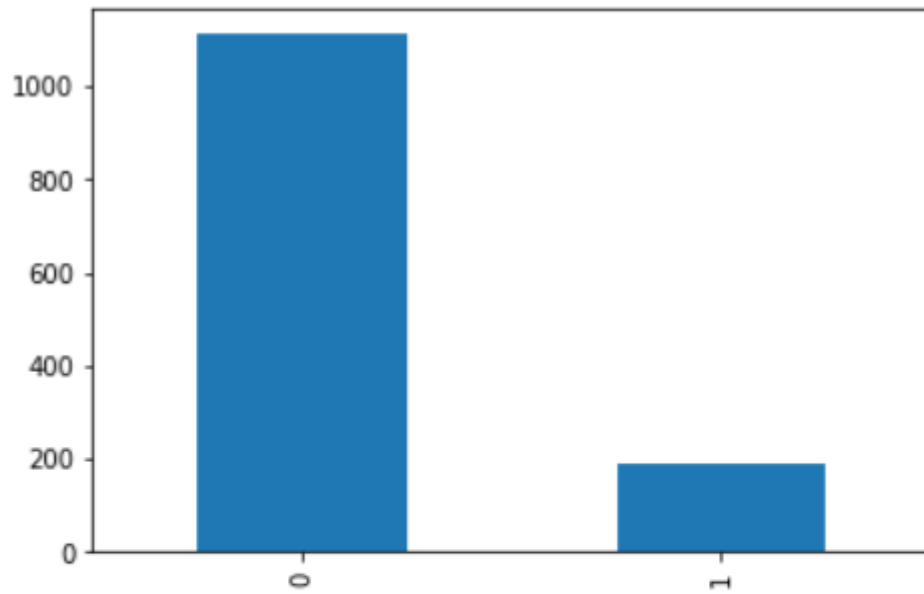
- Most of the laptops are of size 15.6 inches.



**Scatterplot 'Inches' vs 'Price'**

**Observation:-**

- With the increase in size the laptop price is increasing but the correlation is not that strong, there is not a very rapid increase in the price.
- Laptops between size 13-14 inches are similar in prize.

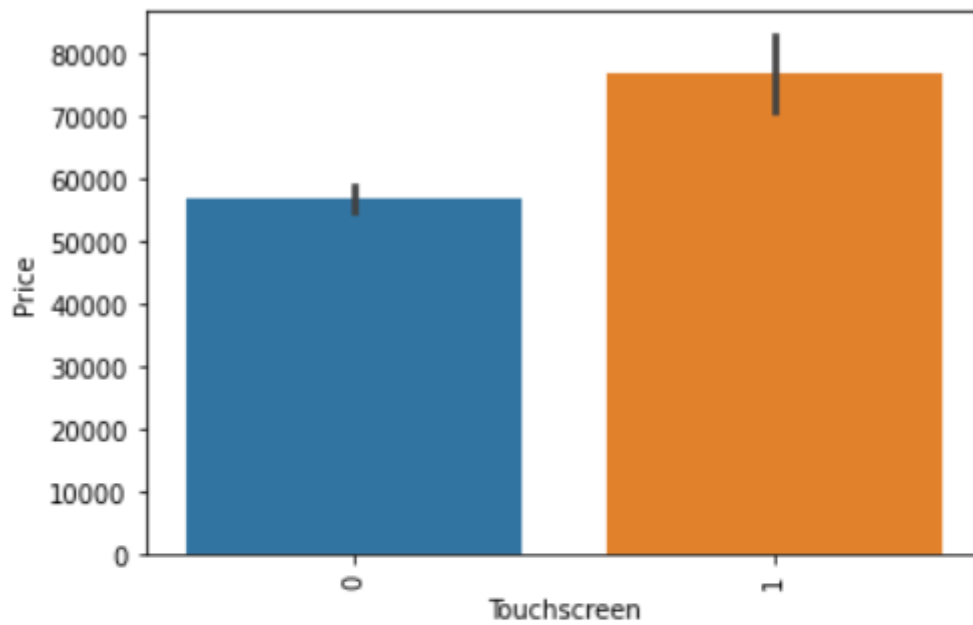


**Bar plot for Touchscreen**

**Observation:-**

- Majority of laptops are not touchscreen.
-

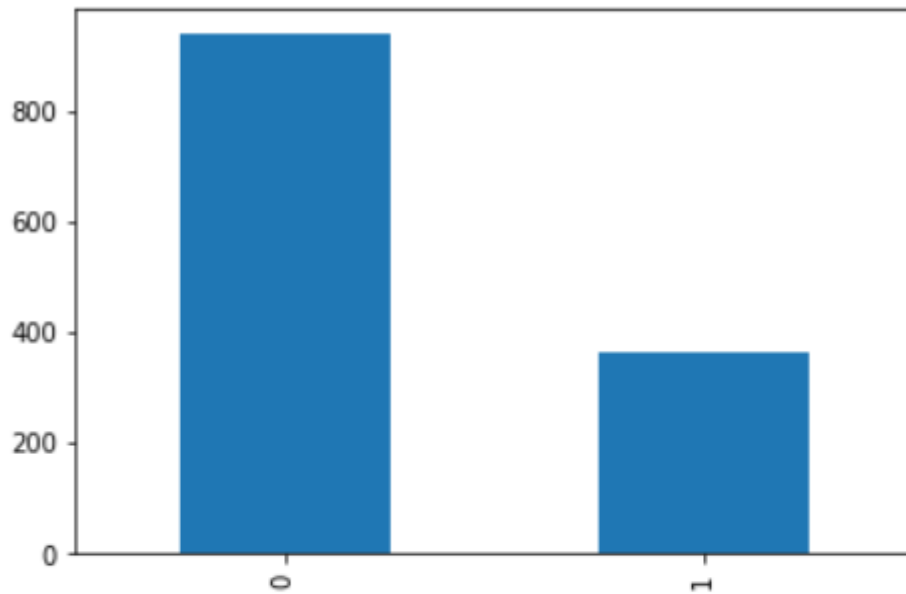




### Barplot for 'Touchscreen' vs 'Price'

#### Observation:-

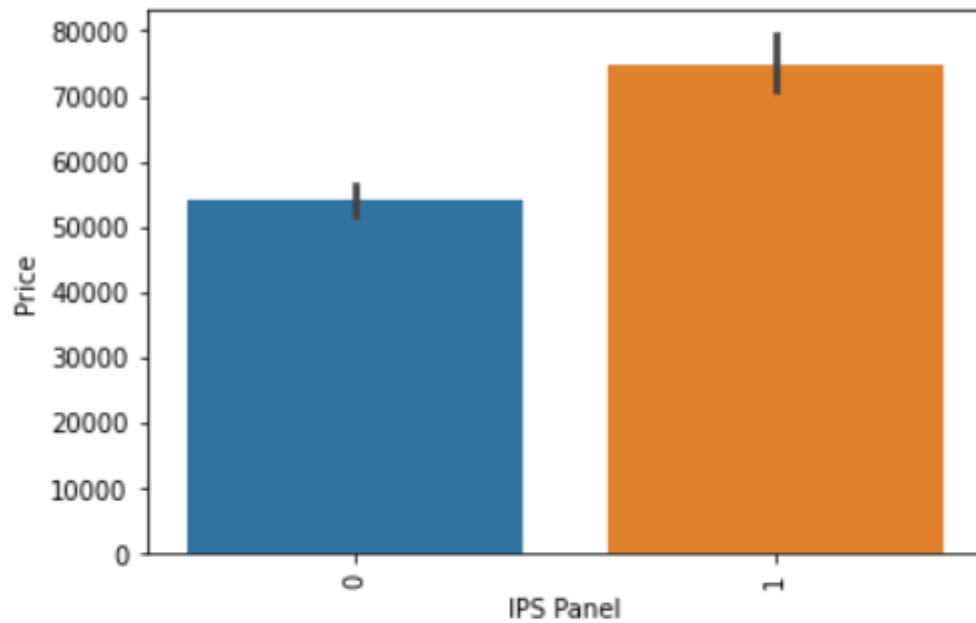
- Laptops with touchscreen feature are higher in price.
  - Price variation can be seen on the basis of touchscreen feature.
-



### Barplot for IPS Panel

#### Observation:-

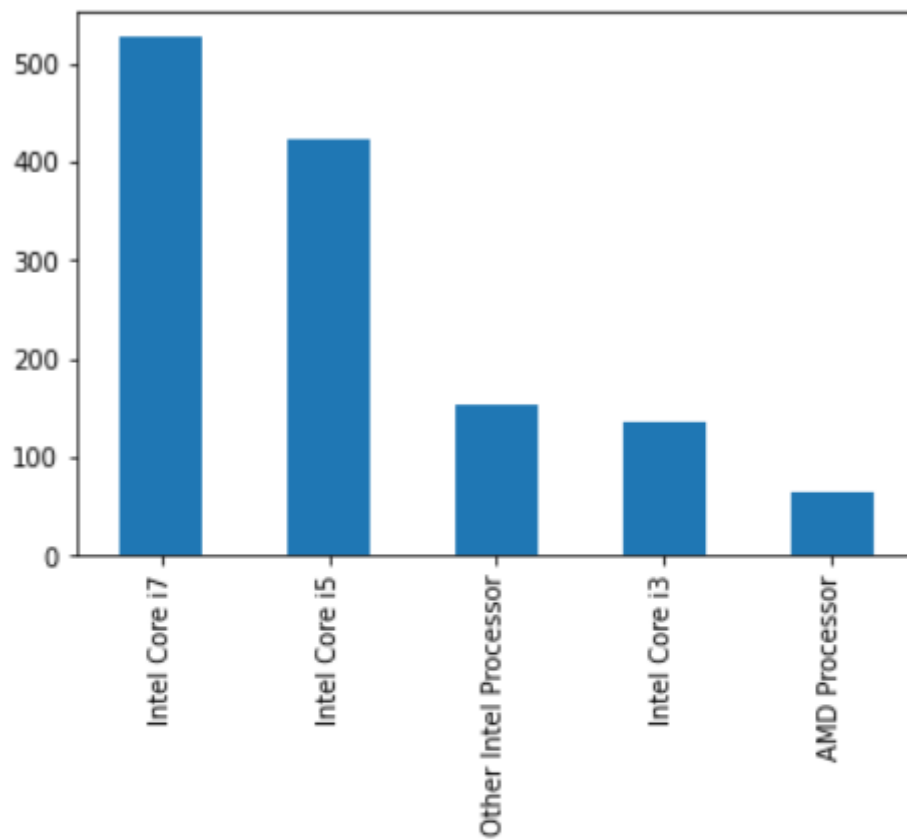
- Majority of laptops do not have IPS Panel.
-



**Bar plot for 'IPS Panel' vs 'Price'**

**Observation:-**

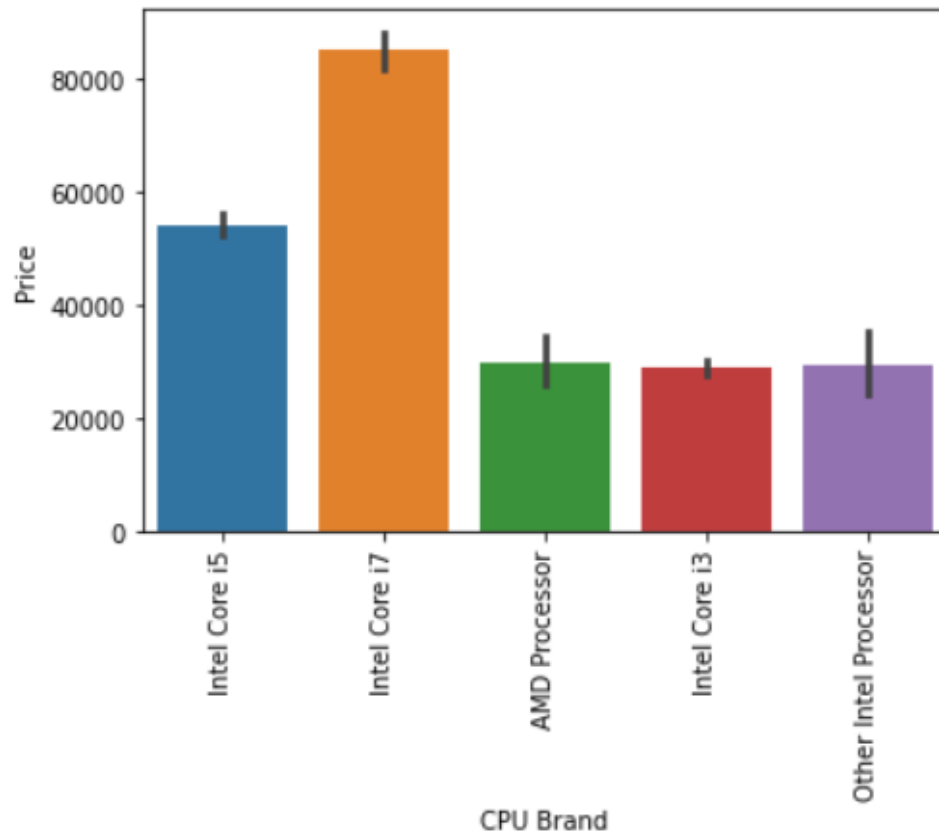
- Laptops with IPS Panel have higher price.
  - Variation of price with IPS Panel is seen.
-



### Barplot for CPU Brand

#### Observation:-

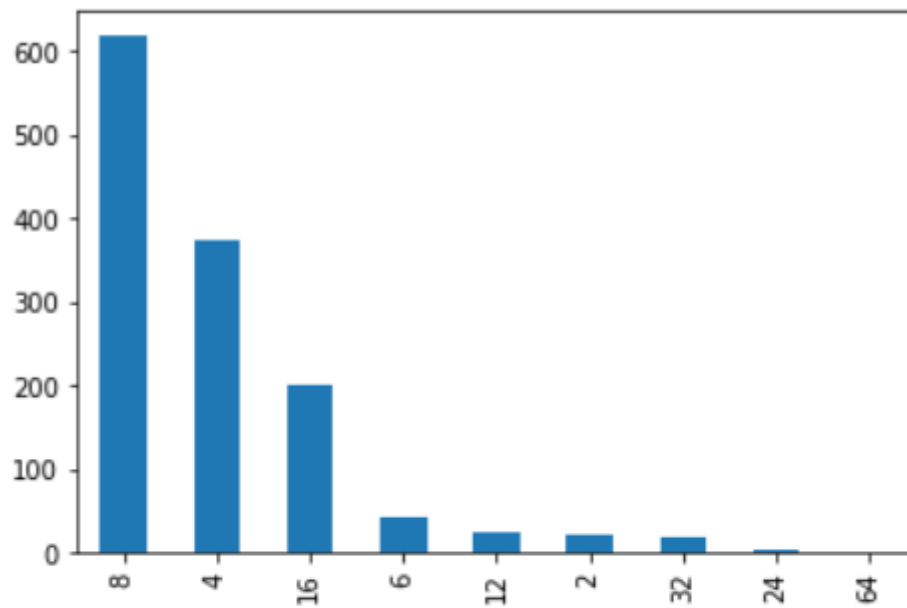
- Majority laptops have Intel Core i7 and Intel Core i5.



### Barplot CPU Brand VS Price

#### Observation:-

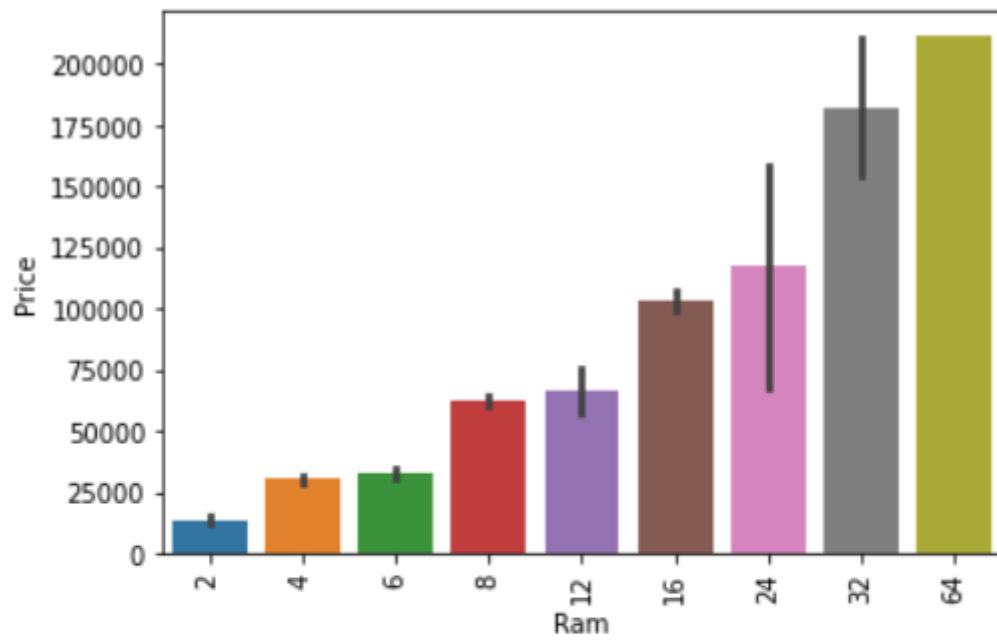
- Maximum average price if for Intel Core i7, followed by Intel Core i5.
  - AMD, Intel Core i3 and Other Intel Processor have similar average price.
-



### Barplot of Ram

#### Observation:-

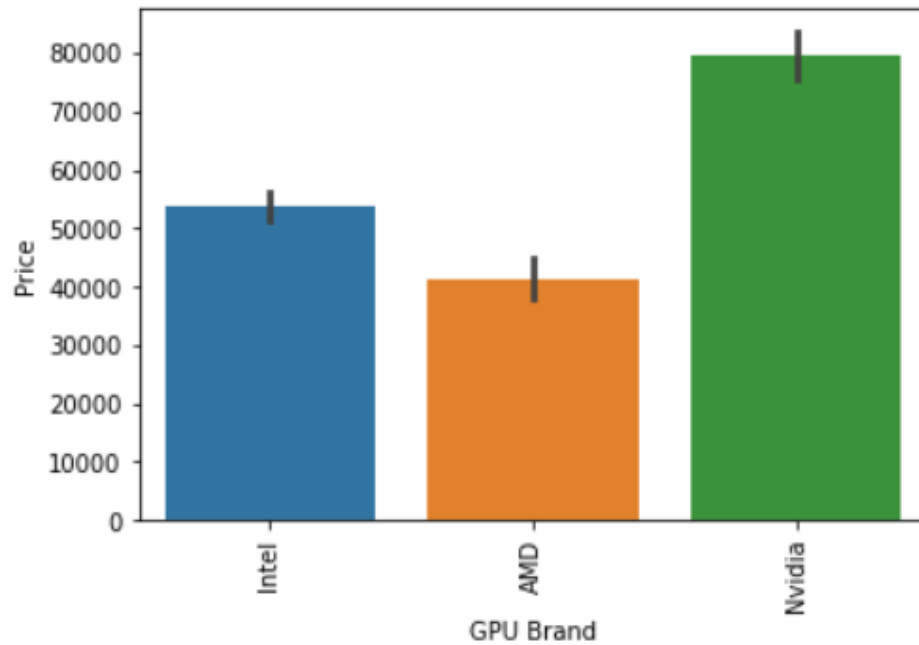
- Majority of laptops have 8GB RAM.
  - Followed by 4GB and 16GB.
  - Note:- The dataset is old.
-



### Bar plot Ram vs Price

#### Observation:-

- As the RAM size increases, price of laptop also increases.
-

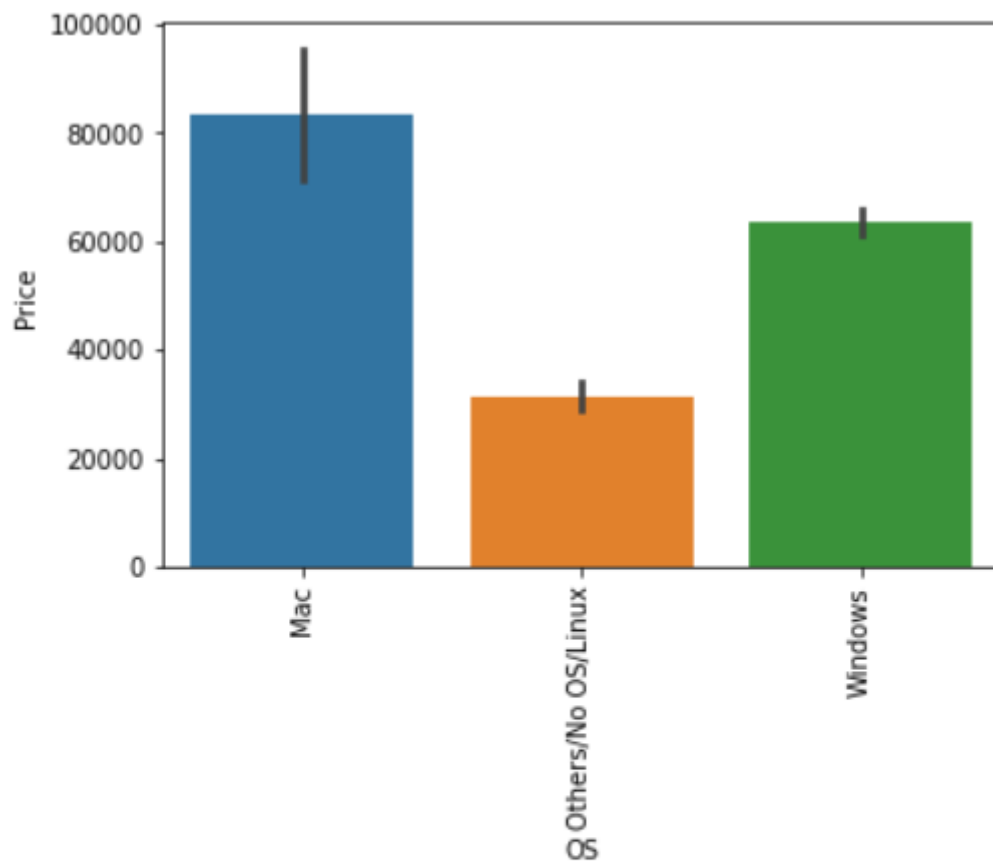


### Bar Plot GPU Brand vs Price

#### Observation:-

- Laptops with NVIDIA GPU has high prices, followed by Intel and then AMD.
-

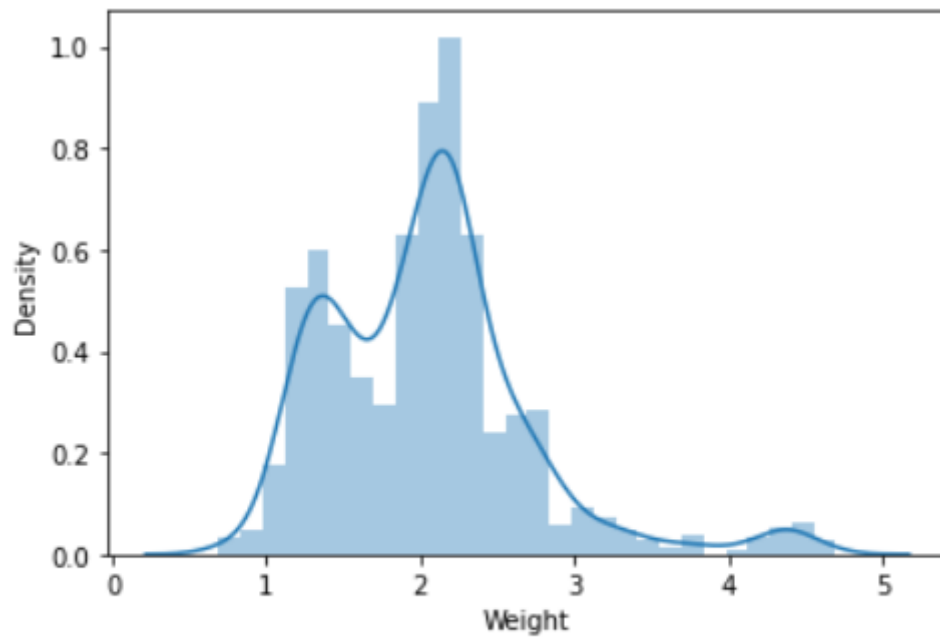




### Barplot of OS VS Price

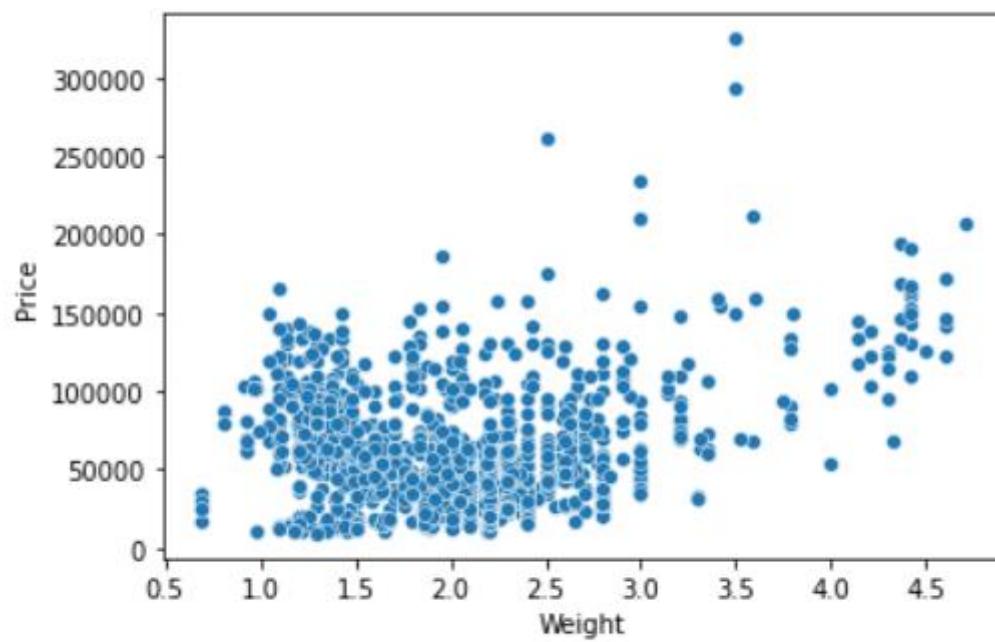
#### Observation:-

- Laptops with macOS has high prices followed by windows.



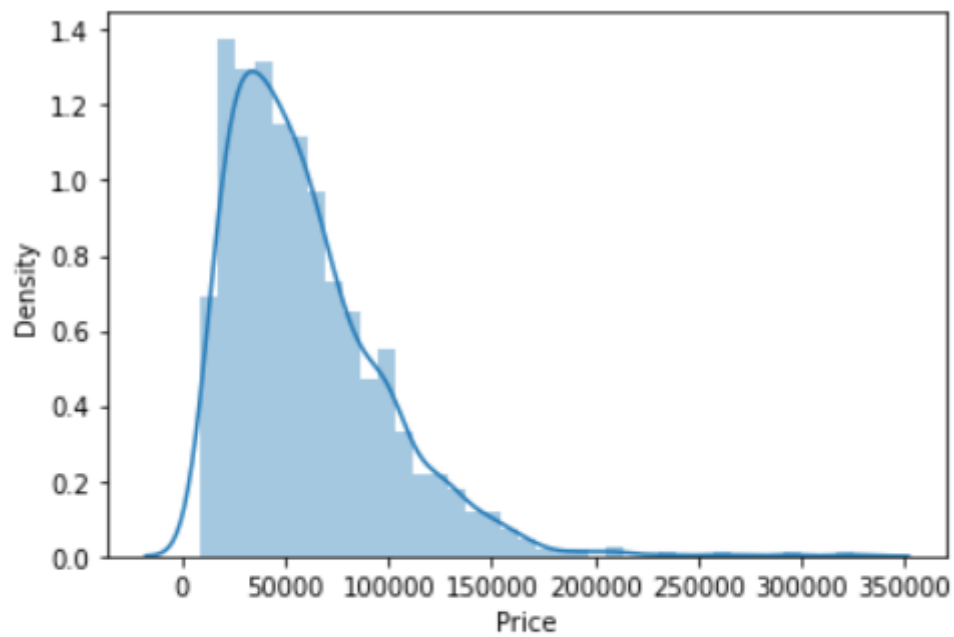
**Distribution of laptop weights.**

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**Scatterplot of laptop weights.**

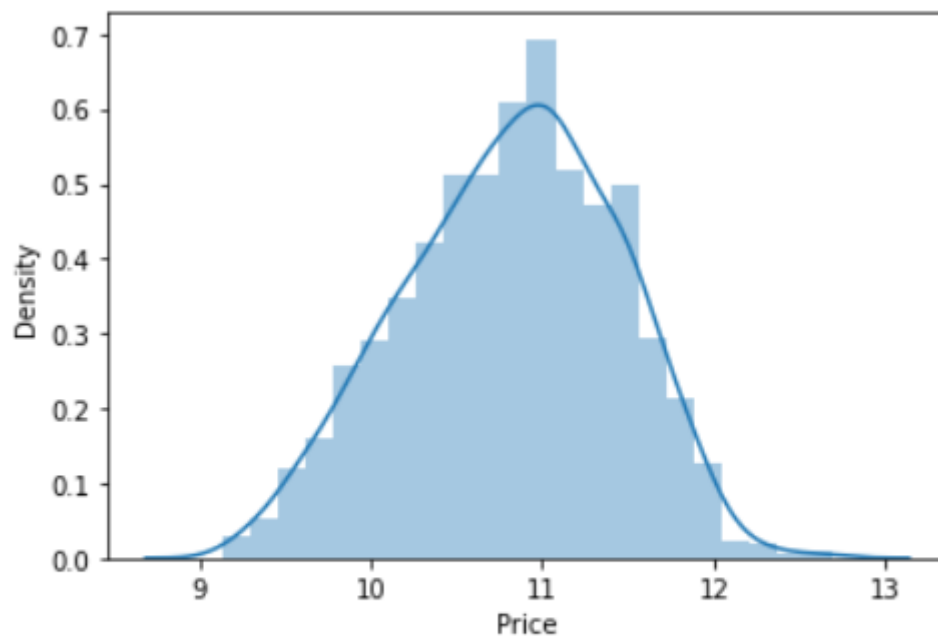
---



### **Distribution plot of Price**

#### **Observation:-**

- Price column is right skewed.



### **Applying log transformation to Price**