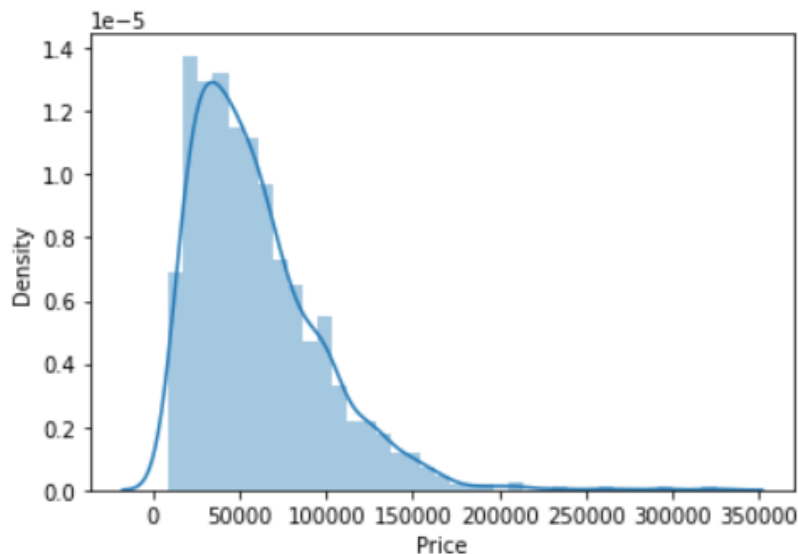


Distribution plot for 'Price' column.

```
: sns.distplot(df['Price'])
```

```
C:\Users\shash\anaconda3\lib\site-packages\seaborn\distributions.py:2619:
d will be removed in a future version. Please adapt your code to use either
`faceted_grid` (an axes-level function for faceted histograms) or `histplot`
(an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

```
: <AxesSubplot: xlabel='Price', ylabel='Density'>
```



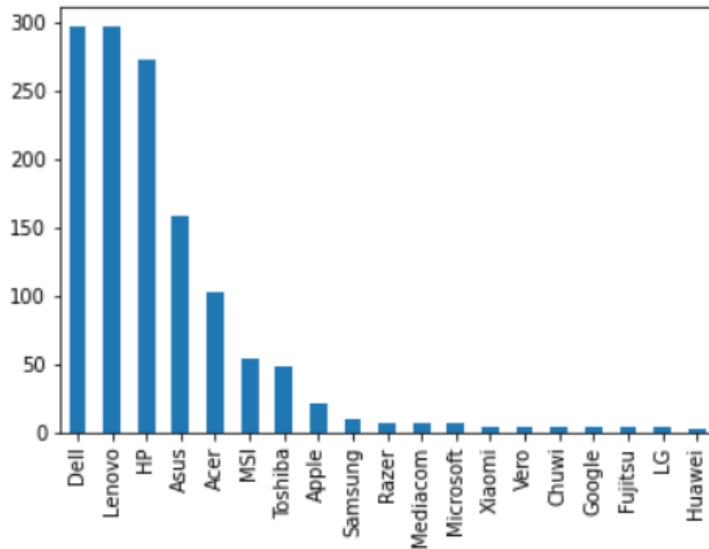
Observation:-

- 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.

```
df['Company'].value_counts().plot(kind='bar')
```

<AxesSubplot: >

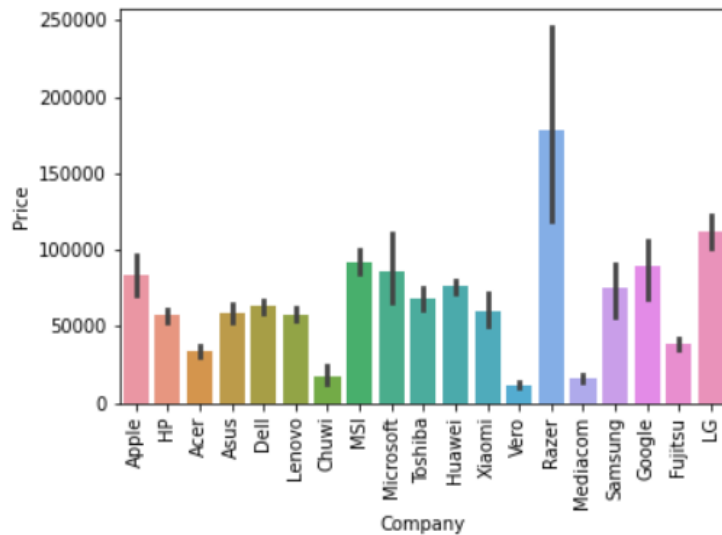


Observation:-

- 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'.

```
sns.barplot(x=df['Company'],y=df['Price'])  
plt.xticks(rotation='vertical')  
plt.show()
```



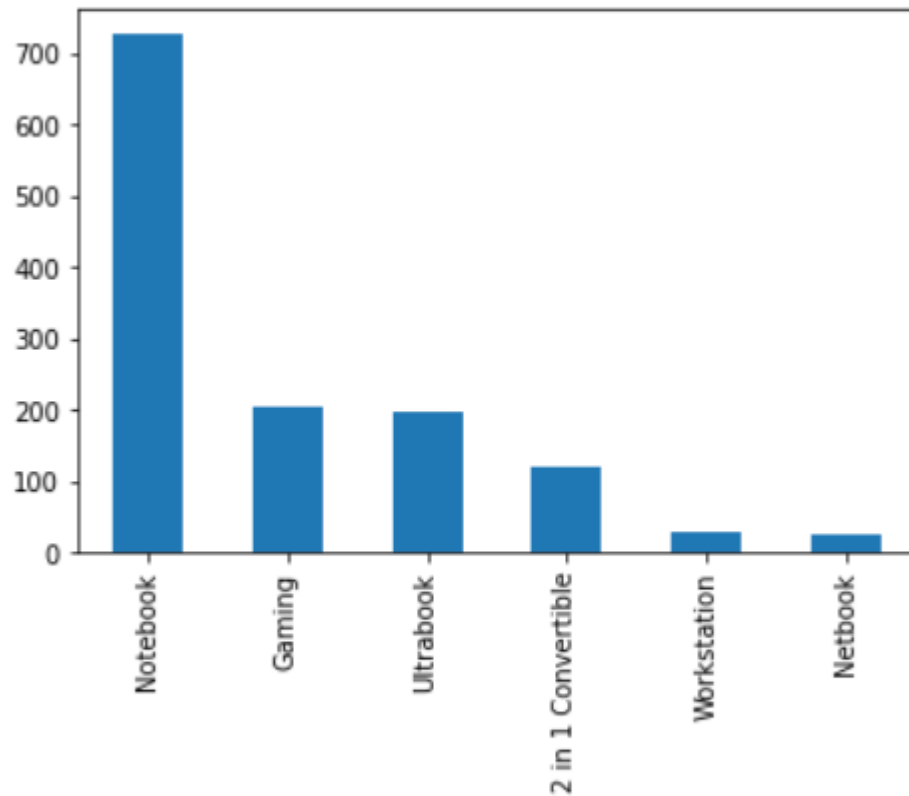
Observation:-

- 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.

```
df['TypeName'].value_counts().plot(kind='bar')
```

<AxesSubplot: >

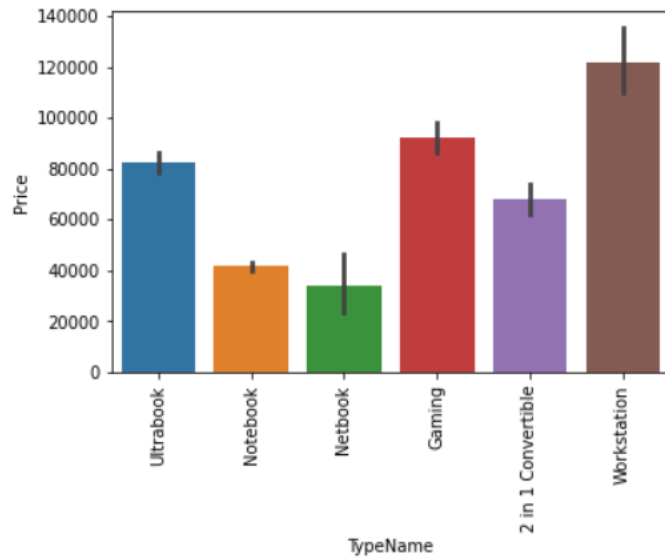


Observation:-

- 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'

```
sns.barplot(x=df['TypeName'],y=df['Price'])  
plt.xticks(rotation='vertical')  
plt.show()
```



Observation:-

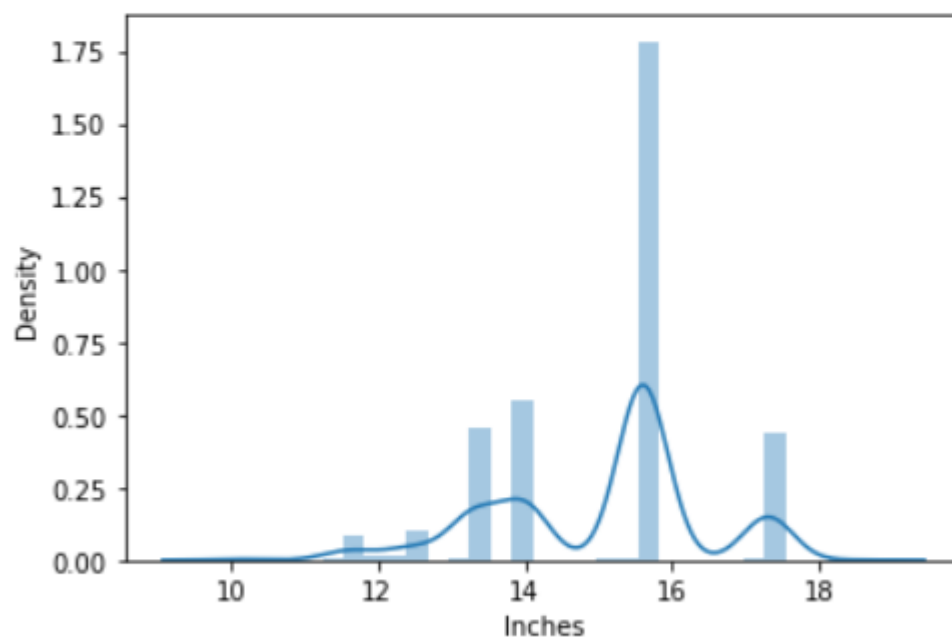
- Top 3 most expensive type of laptops are :- Workstation, Gaming, Ultrabook with price greater than Rs 80000.
- Type of laptop is affecting the price of laptop.

Distribution plot for Inches column.

```
sns.distplot(df['Inches'])
```

C:\Users\shash\anaconda3\lib\site-packages\seaborn\dists\rst.py:100: FutureWarning: The `distplot` function will be removed in a future version. Please adapt your code to use `histplot` (with the `hist` parameter for density) or `histplot` (an axes-level function for histograms).
warnings.warn(msg, FutureWarning)

<AxesSubplot: xlabel='Inches', ylabel='Density'>



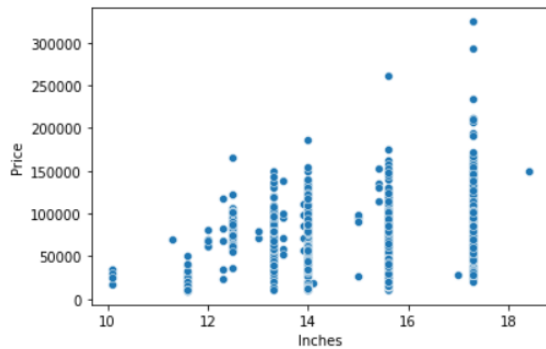
Observation:-

- Most of the laptops are of size 15.6 inches.

Scatterplot 'Inches' vs 'Price'

```
sns.scatterplot(x=df['Inches'],y=df['Price'])
```

```
<AxesSubplot: xlabel='Inches', ylabel='Price'>
```



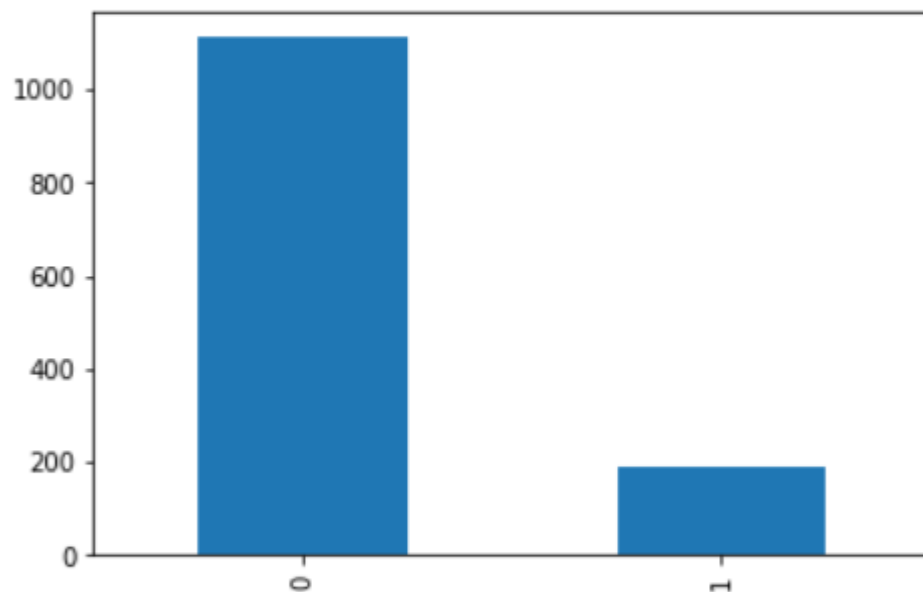
Observation:-

- 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 price.

Bar plot for Touchscreen

```
df['Touchscreen'].value_counts().plot(kind='bar')
```

```
<AxesSubplot: >
```

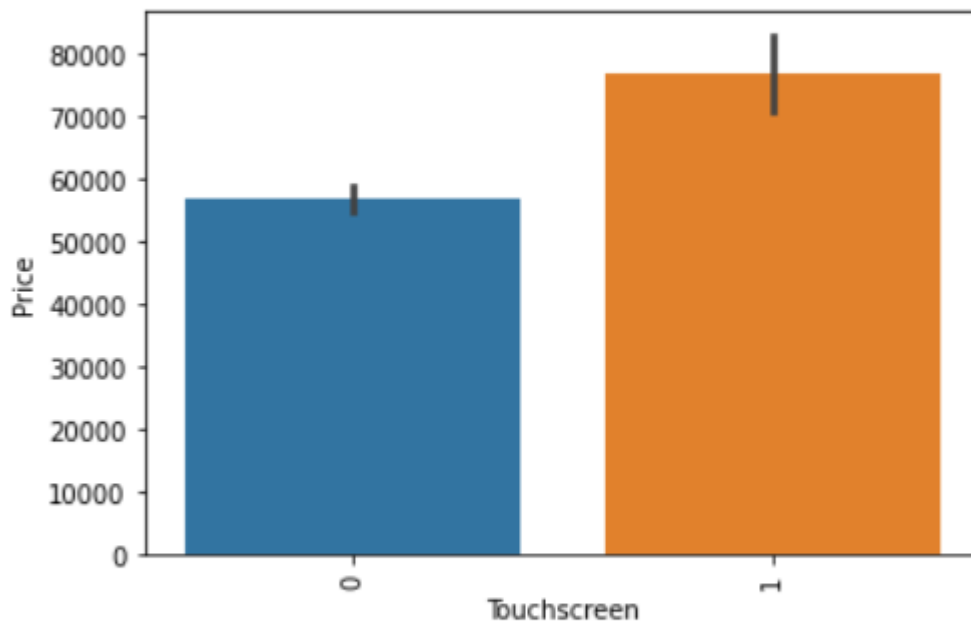


Observation:-

- Majority of laptops are not touchscreen.

Barplot for 'Touchscreen' vs 'Price'

```
sns.barplot(x=df['Touchscreen'],y=df['Price'])  
plt.xticks(rotation='vertical')  
plt.show()
```



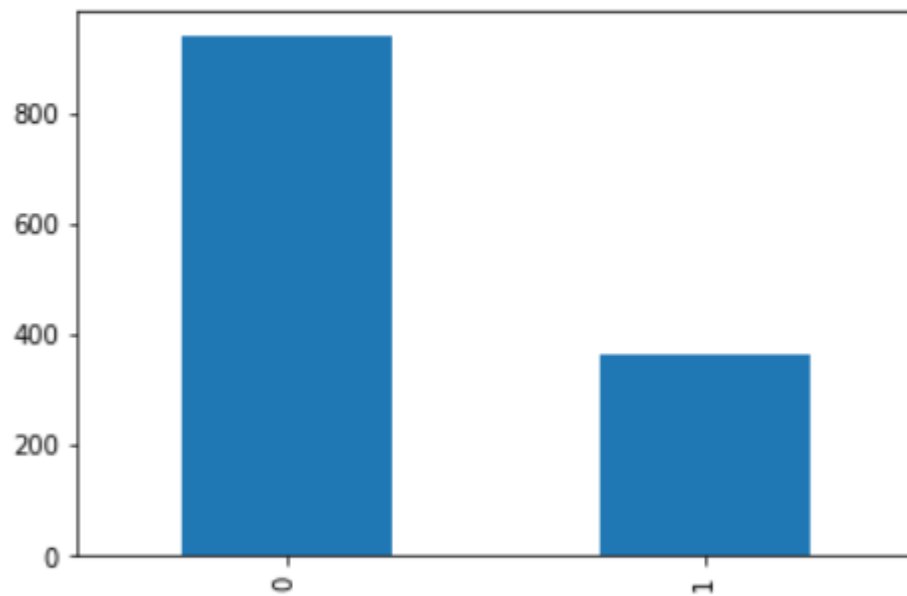
Observation:-

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

Barplot for IPS Panel

```
df['IPS Panel'].value_counts().plot(kind='bar')
```

<AxesSubplot: >

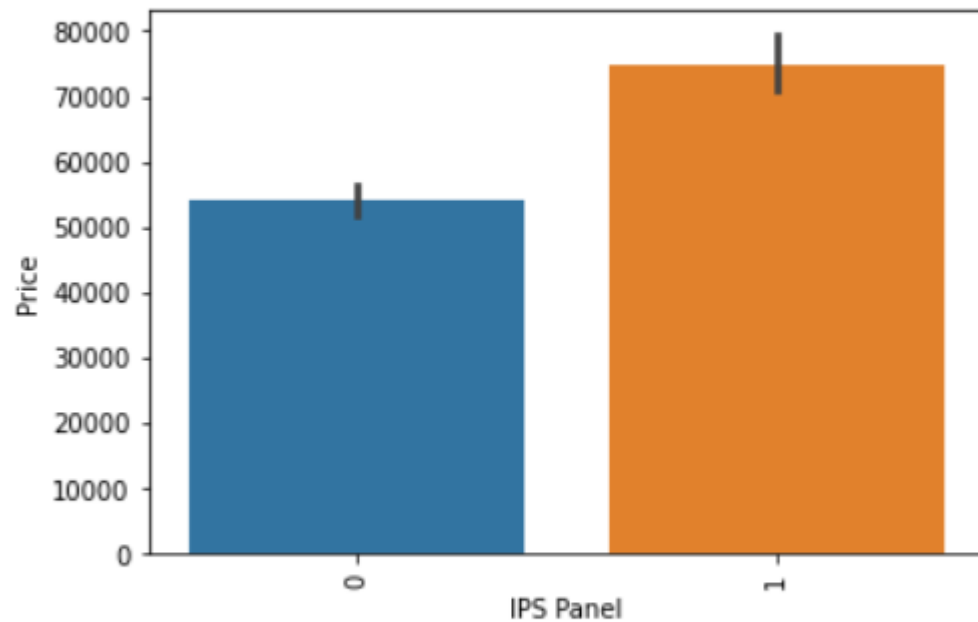


Observation:-

- Majority of laptops do not have IPS Panel.

Bar plot for 'IPS Panel' vs 'Price'

```
sns.barplot(x=df['IPS Panel'],y=df['Price'])  
plt.xticks(rotation='vertical')  
plt.show()
```



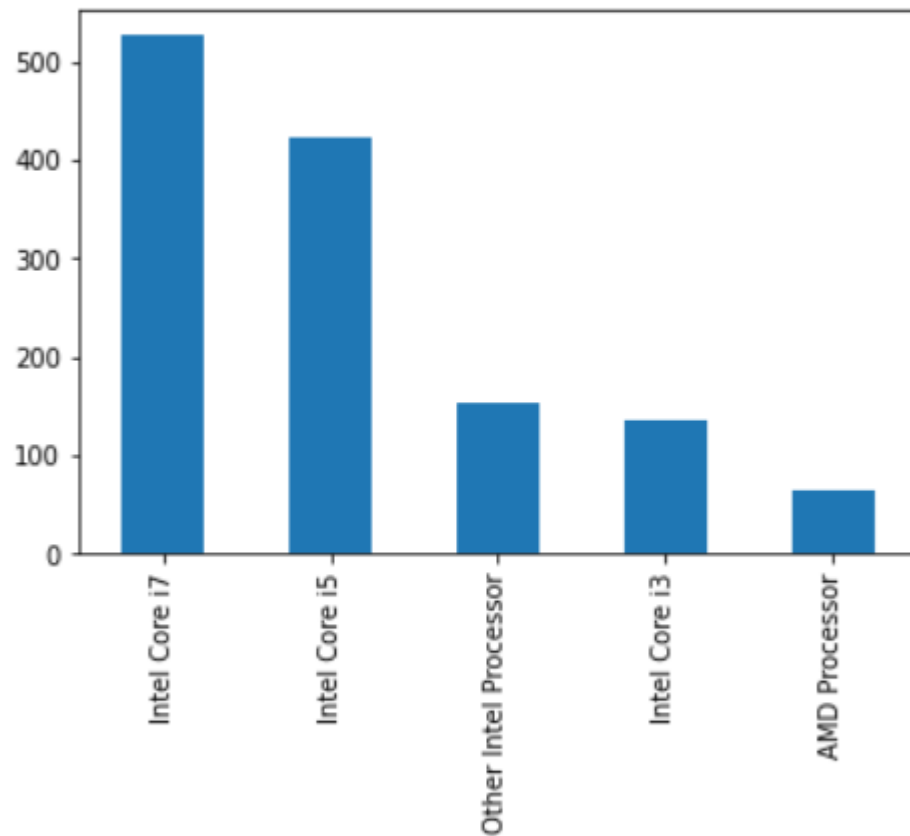
Observation:-

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

Barplot for CPU Brand

```
: df['CPU Brand'].value_counts().plot(kind='bar')
```

```
: <AxesSubplot: >
```

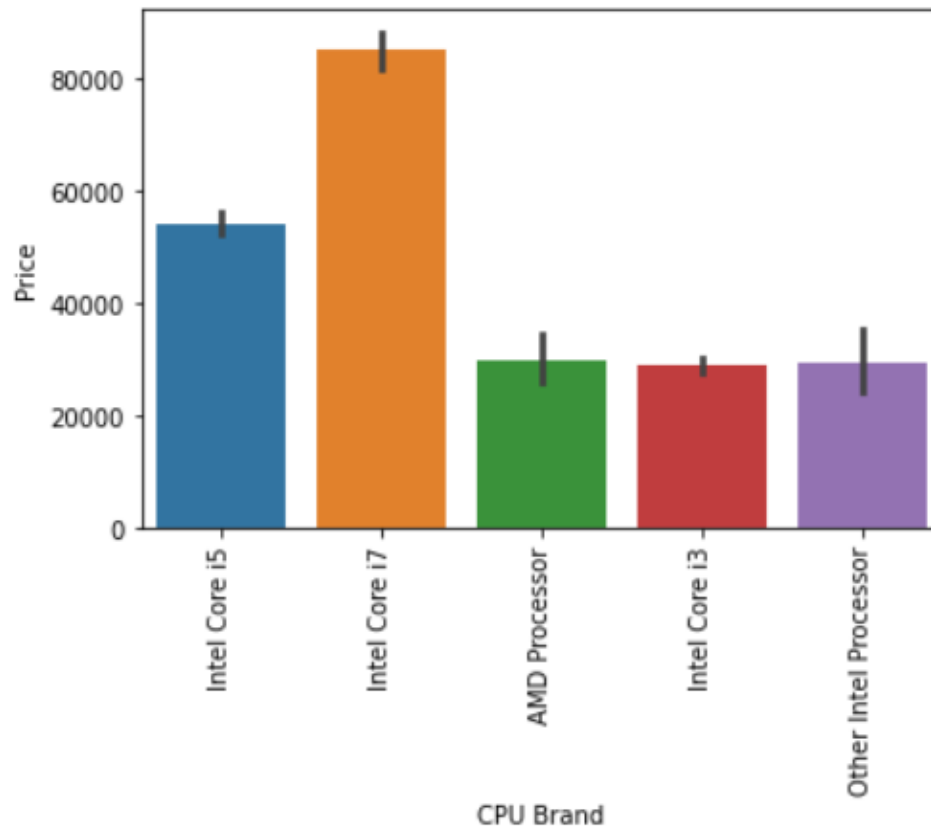


Observation:-

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

Barplot CPU Brand VS Price

```
: sns.barplot(x=df['CPU Brand'],y=df['Price'])  
plt.xticks(rotation='vertical')  
plt.show()
```



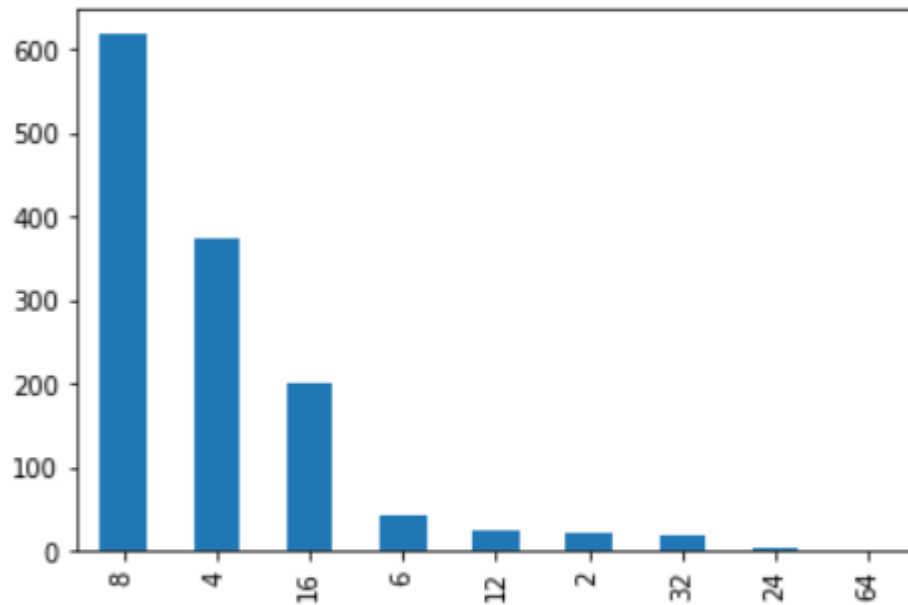
Observation:-

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

Barplot of Ram

```
df['Ram'].value_counts().plot(kind='bar')
```

<AxesSubplot: >

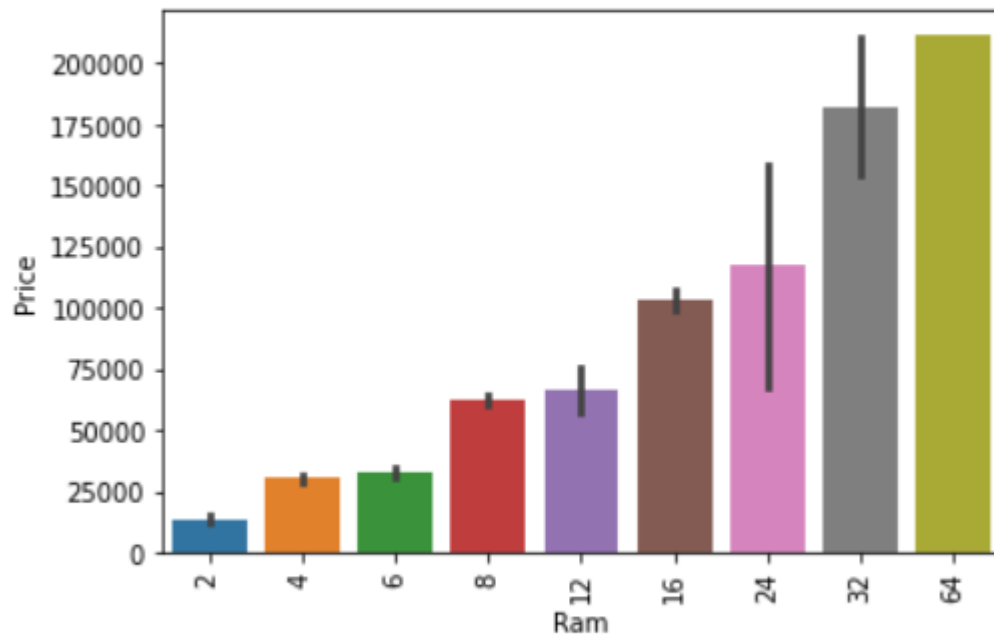


Observation:-

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

Bar plot Ram vs Price

```
sns.barplot(x=df['Ram'],y=df['Price'])  
plt.xticks(rotation='vertical')  
plt.show()
```

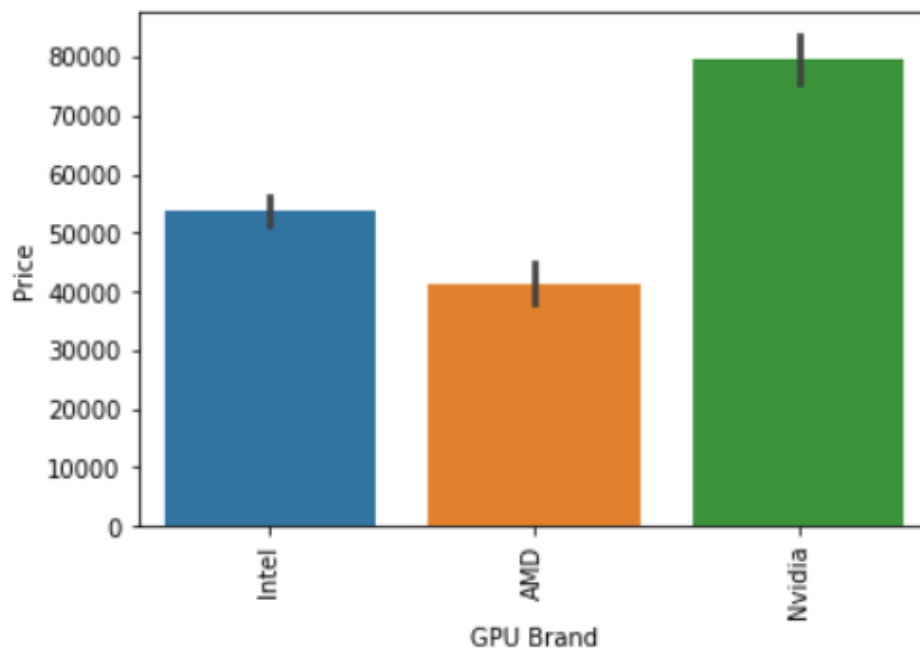


Observation:-

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

Bar Plot GPU Brand vs Price

```
sns.barplot(x=df['GPU Brand'],y=df['Price'])  
plt.xticks(rotation='vertical')  
plt.show()
```

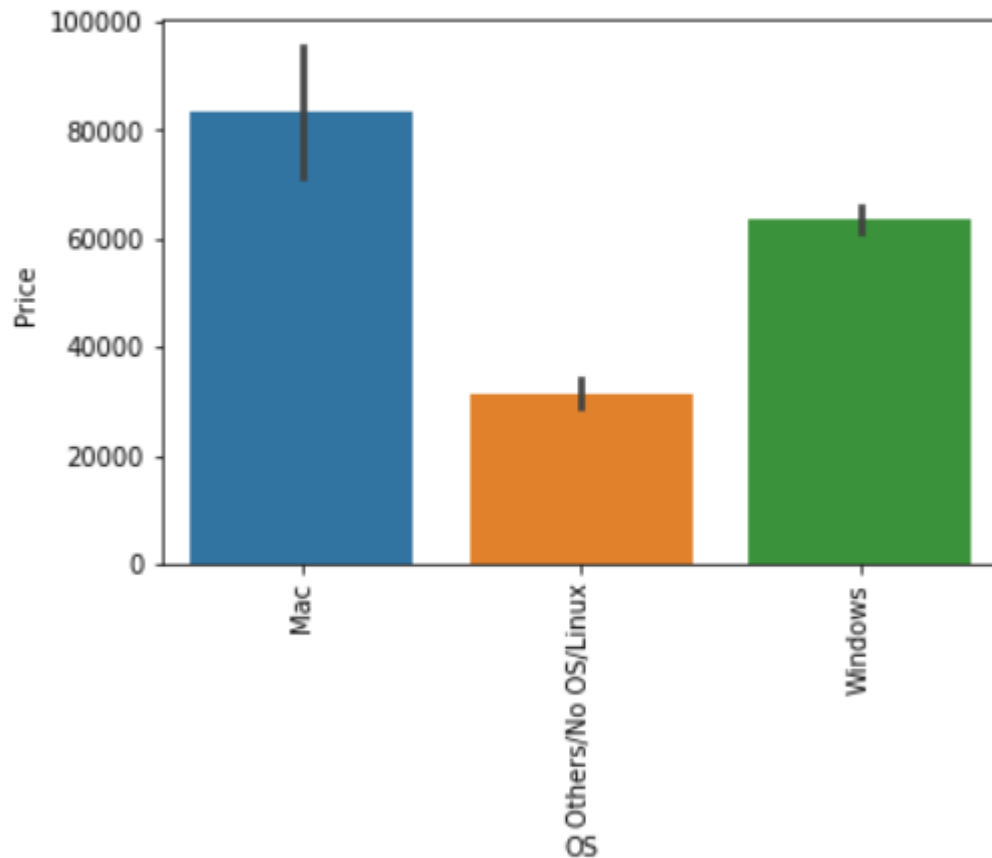


Observation:-

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

Barplot of OS VS Price

```
sns.barplot(x=df['OS'],y=df['Price'])  
plt.xticks(rotation='vertical')  
plt.show()
```



Observation:-

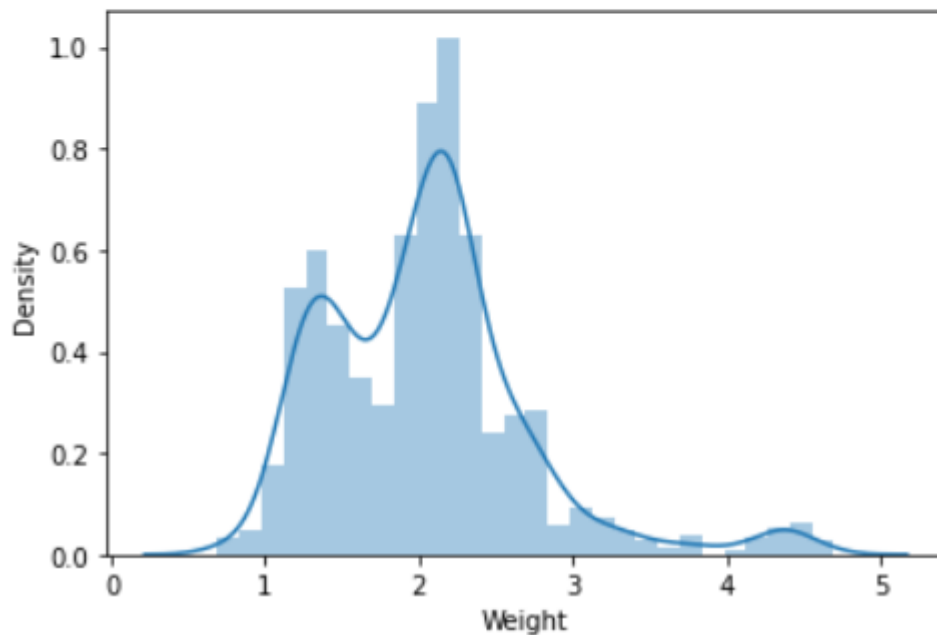
- Laptops with macOS has high prices followed by windows.

Distribution of laptop weights.

```
: sns.distplot(df['Weight'])
```

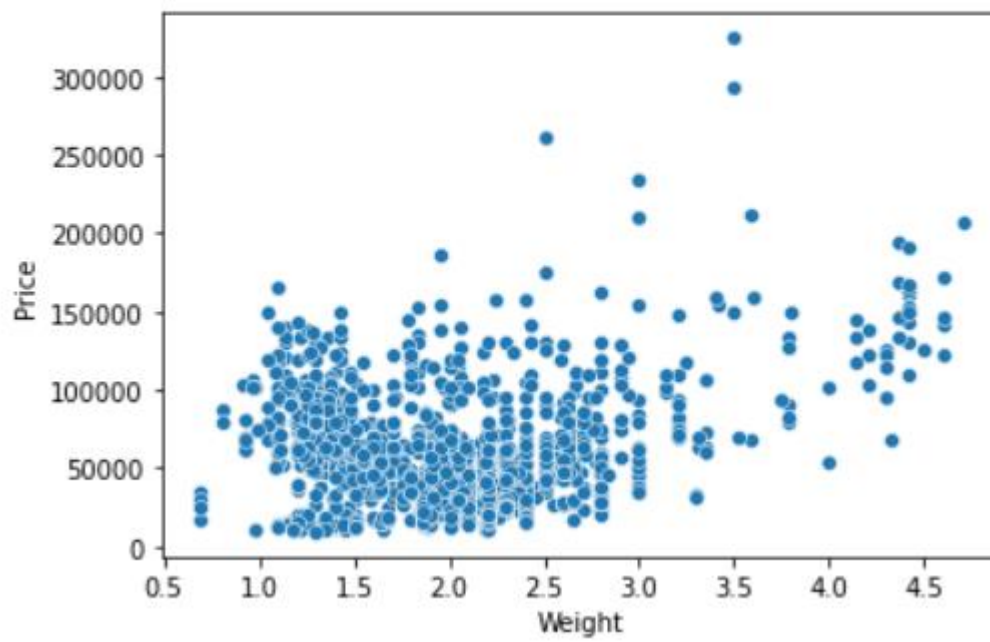
C:\Users\shash\anaconda3\lib\site-packages\seaborn\distributions\distplot.py:269: FutureWarning: The distplot function will be removed in a future version. Please adapt your code to use sns.histplot (a faceted histogram) or `histplot` (an axes-level function for histograms).
warnings.warn(msg, FutureWarning)

```
: <AxesSubplot: xlabel='Weight', ylabel='Density'>
```



```
sns.scatterplot(x=df['Weight'],y=df['Price'])
```

```
<AxesSubplot: xlabel='Weight', ylabel='Price'>
```

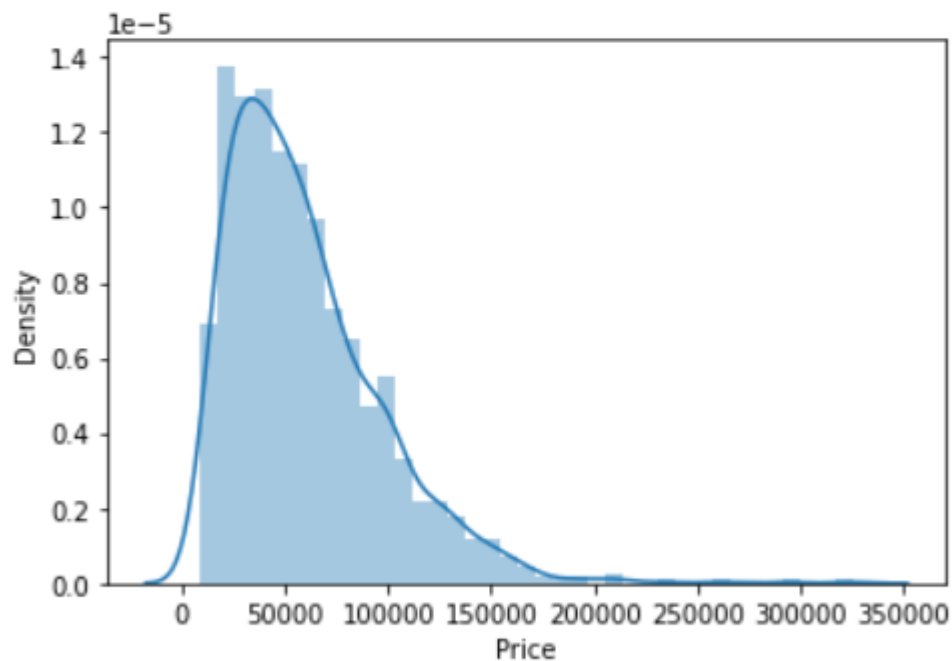


Distribution plot of Price

```
sns.distplot(df['Price'])
```

C:\Users\shash\anaconda3\lib\site-packages\seaborn\dists: The `distplot` function will be removed in a future version. Please adapt your code to use `distplot` (for compatibility) or `histplot` (an axes-level function for histograms).
warnings.warn(msg, FutureWarning)

<AxesSubplot: xlabel='Price', ylabel='Density'>



Observation:-

- Price column is right skewed.

Applying log transformation to Price

```
sns.distplot(np.log(df['Price']))
```

C:\Users\shash\anaconda3\lib\site-packages\seaborn\dists: The `distplot` function will be removed in a future version. Please adapt your code to use `kdeplot` (for kernel density estimation) or `histplot` (an axes-level function for histograms).
warnings.warn(msg, FutureWarning)

<AxesSubplot: xlabel='Price', ylabel='Density'>

