```
#import important libraries
import warnings
warnings.filterwarnings("ignore")
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import plotly.graph_objects as go
```

```
df = pd.read_csv("/content/drive/MyDrive/Colab Notebooks/Dataset/Market.csv")
df.head(10)
```

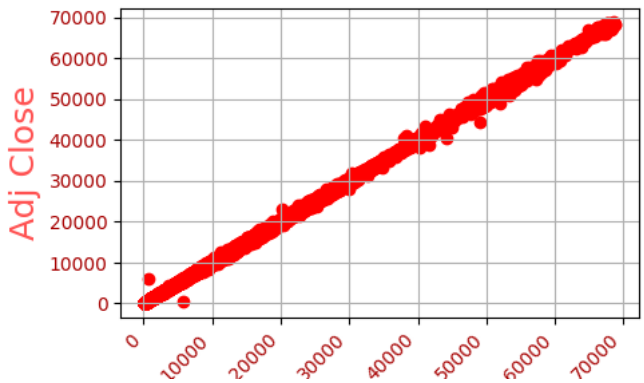
	Index	Date	Open	High	Low	Close	Adj Close	Volume
0	NYA	12/31/1965	528.690002	528.690002	528.690002	528.690002	528.690002	0.0
1	NYA	1/3/1966	527.210022	527.210022	527.210022	527.210022	527.210022	0.0
2	NYA	1/4/1966	527.840027	527.840027	527.840027	527.840027	527.840027	0.0
3	NYA	1/5/1966	531.119995	531.119995	531.119995	531.119995	531.119995	0.0
4	NYA	1/6/1966	532.070007	532.070007	532.070007	532.070007	532.070007	0.0
5	NYA	1/7/1966	532.599976	532.599976	532.599976	532.599976	532.599976	0.0
6	NYA	1/10/1966	533.869995	533.869995	533.869995	533.869995	533.869995	0.0
7	NYA	1/11/1966	534.289978	534.289978	534.289978	534.289978	534.289978	0.0
8	NYA	1/12/1966	533.340027	533.340027	533.340027	533.340027	533.340027	0.0
9	NYA	1/13/1966	534.400024	534.400024	534.400024	534.400024	534.400024	0.0

```
df.describe()
```

	Open	High	Low	Close	Adj Close	
count	110253.000000	110252.000000	110251.000000	110250.000000	110244.000000	1.1
mean	7658.561932	7704.538416	7608.129749	7657.740822	7657.982529	1.2
std	9011.455529	9066.605458	8954.536718	9011.555549	9011.723572	4.3
min	54.869999	54.869999	54.869999	54.869999	54.869999	0.0
25%	1855.060059	1864.687470	1844.015015	1855.347473	1855.057556	0.0
50%	5194.399902	5226.750000	5154.299805	5194.889892	5195.699951	4.3
75%	10134.299810	10207.827635	10060.369630	10134.867430	10135.512452	1.7
max	68775.062500	69403.750000	68516.992190	68775.062500	68775.062500	9.4

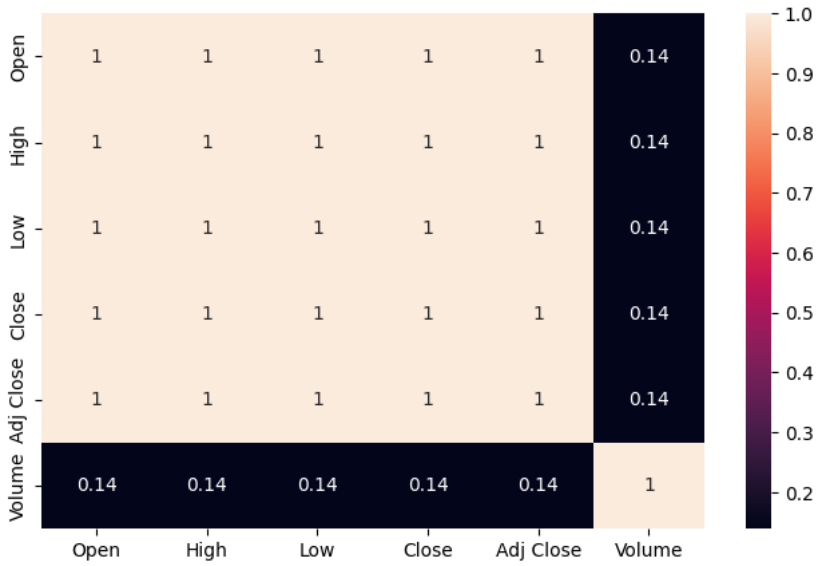
```
plt.figure(figsize=(5,3))
color = "#ff0000"
color_t = "#ff5252"
text_color = "#a70000"
custom_palette = ["#0096c7", "#f72585"]

plt.scatter(df['Open'],df['Adj Close'] , color=color)
plt.xticks(rotation=45, ha='right', color=text_color)
plt.yticks(rotation=0, ha='right', color=text_color)
plt.xlabel(' Open ', color=color_t, fontsize=18)
plt.ylabel('Adj Close' , color=color_t, fontsize=18)
plt.grid()
# Show the plot
plt.show()
```



```
DF1 = df[["Open","High","Low", 'Close','Adj Close','Volume']]
```

```
plt.figure(figsize=(8, 5))
hm = sns.heatmap(DF1.corr(), annot=True)
```




```
plt.figure(figsize=(15, 3))
color = "#f72585"
color_t = "#ff5252"
text_color = "#a70000"
custom_palette = ["#0096c7"]
plt.xticks(rotation=90, ha='right', color=text_color)
plt.yticks(rotation=0, ha='right', color=text_color)
plt.xlabel('Date', color=color_t, fontsize=18)
plt.ylabel('Adj Close' , color=color_t, fontsize=18)
# Show the plot
sns.lineplot(x="Date", y="Adj Close", data=df , color = color)
plt.grid()
# displaying the plot
plt.show()
```