Stock Price Pridiction Machine Learning Project

Library Used for Pandas -Data Analysis, Sklearn -Machine Learning

This Project Used Supervised Machine Learning Type & Used LinearRegression Aalgorithm

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Import Libraries

In [2]:
```
import pandas as pd
import matplotlib.pyplot as plt
```

Data Load

In [3]:
```
data=pd.read_csv('Stock Price.csv')
```

In [4]:
```
data
```

Out[4]:

	Company Name	Date	Open	High	Low	Close	Adj Close	Volume	CloseUSD
0	CMCSA	12/31/1986	2568.300049	2568.300049	2568.300049	2568.300049	2568.300049	0	333.879006
1	KMI	1/2/1987	2540.100098	2540.100098	2540.100098	2540.100098	2540.100098	0	330.213013
2	INTC	1/5/1987	2552.399902	2552.399902	2552.399902	2552.399902	2552.399902	0	331.811987
3	MU	1/6/1987	2583.899902	2583.899902	2583.899902	2583.899902	2583.899902	0	335.906987
4	GE	1/7/1987	2607.100098	2607.100098	2607.100098	2607.100098	2607.100098	0	338.923013
...	...	...	...	...	...	...	...	...	...
4387	YRIV	9/23/2004	13198.790040	13282.860350	13179.129880	13280.429690	13280.429690	371459600	1726.455860
4388	YTEN	9/24/2004	13236.250000	13253.330080	13035.160160	13066.839840	13066.839840	404185600	1698.689179
4389	ZKIN	9/27/2004	13053.599610	13067.759770	12908.099610	13021.900390	13021.900390	318864400	1692.847051
4390	ZOM	9/28/2004	12933.320310	12967.070310	12884.400390	12950.799810	12950.799810	299312200	1683.603975
4391	ZYME	9/30/2004	13056.799810	13154.910160	13052.379880	13120.030270	13120.030270	360964200	1705.603935

4392 rows × 9 columns

Seprate Data for Model Train & Test

In [24]:
```
X=data[['Open','High','Low']]
Y=data['CloseUSD']
```

Create and fit your model

In [7]:
```
from sklearn.linear_model import LinearRegression
```

In [25]:
```
 Model =LinearRegression().fit(X,Y)
```

In [12]:
```
Model
```

Out[12]:
```
LinearRegression()
```

In [16]:
```
Model.coef_
```

Out[16]:
```
array([-0.07824471,  0.10945547,  0.09876933])
```

In [17]:
```
Model.intercept_
```

Out[17]:
```
0.0689627100684902
```

Time Check My Model and Pridiction

In [20]:
```
Model.predict([[2568.,2568.300049,2568.300049]])
```

```
C:\Users\Abdul Qadir\anaconda3\lib\site-packages\sklearn\base.py:450: UserWarning: X does not have valid feature names, but LinearRegression was fitted with f
eature names
  warnings.warn(
```

Out[20]:
```
array([333.92031989])
```

In [18]:
```
data.head(5)
```

Out[18]:

	Company Name	Date	Open	High	Low	Close	Adj Close	Volume	CloseUSD
0	CMCSA	12/31/1986	2568.300049	2568.300049	2568.300049	2568.300049	2568.300049	0	333.879006
1	KMI	1/2/1987	2540.100098	2540.100098	2540.100098	2540.100098	2540.100098	0	330.213013
2	INTC	1/5/1987	2552.399902	2552.399902	2552.399902	2552.399902	2552.399902	0	331.811987
3	MU	1/6/1987	2583.899902	2583.899902	2583.899902	2583.899902	2583.899902	0	335.906987
4	GE	1/7/1987	2607.100098	2607.100098	2607.100098	2607.100098	2607.100098	0	338.923013

My Model are Perfectly Run Correct Pridiction

I try more Pridiction

In [35]:
```
data.head(12)
```

Out[35]:

	Company Name	Date	Open	High	Low	Close	Adj Close	Volume	CloseUSD
0	CMCSA	12/31/1986	2568.300049	2568.300049	2568.300049	2568.300049	2568.300049	0	333.879006
1	KMI	1/2/1987	2540.100098	2540.100098	2540.100098	2540.100098	2540.100098	0	330.213013
2	INTC	1/5/1987	2552.399902	2552.399902	2552.399902	2552.399902	2552.399902	0	331.811987
3	MU	1/6/1987	2583.899902	2583.899902	2583.899902	2583.899902	2583.899902	0	335.906987
4	GE	1/7/1987	2607.100098	2607.100098	2607.100098	2607.100098	2607.100098	0	338.923013
5	BAC	1/8/1987	2603.300049	2603.300049	2603.300049	2603.300049	2603.300049	0	338.429006
6	AAPL	1/9/1987	2561.699951	2561.699951	2561.699951	2561.699951	2561.699951	0	333.020994
7	MSFT	1/12/1987	2614.899902	2614.899902	2614.899902	2614.899902	2614.899902	0	339.936987
8	SIRI	1/13/1987	2590.800049	2590.800049	2590.800049	2590.800049	2590.800049	0	336.804006
9	HPQ	1/14/1987	2578.199951	2578.199951	2578.199951	2578.199951	2578.199951	0	335.165994
10	CX	1/15/1987	2559.100098	2559.100098	2559.100098	2559.100098	2559.100098	0	332.683013
11	CZR	1/16/1987	2542.600098	2542.600098	2542.600098	2542.600098	2542.600098	0	330.538013

In [39]:
```
Model.predict([[2614,2614.,2614]])
```

```
C:\Users\Abdul Qadir\anaconda3\lib\site-packages\sklearn\base.py:450: UserWarning: X does not have valid feature names, but LinearRegression was fitted with f
eature names
  warnings.warn(
```

Out[39]:
```
array([339.83692653])
```

Now My Model is Predict 100% Good so I check my Model Score

In [43]:
```
Model.score(X,Y)
```

Out[43]:
```
0.9998739026281614
```

My Model 99% Accuracy

In [ ]:
```

```