

```
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
```

```
dataset_train = pd.read_csv('/content/microsoft_stocks.csv')
print('shape is = {}'.format(dataset_train))
print(dataset_train.head())
```

```
shape is =
0      2015-01-12  47.540001  46.360001  47.419998  46.599998  23651900.0  Volume \
1      2015-01-13  47.910000  46.060001  46.970001  46.360001  35270600.0
2      2015-01-14  46.240002  45.619999  45.959999  45.959999  29719600.0
3      2015-01-15  46.380001  45.410000  46.220001  45.480000  32750800.0
4      2015-01-16  46.279999  45.169998  45.310001  46.240002  35695300.0
...      ...      ...      ...      ...      ...      ...
1920    2022-08-26  280.339996  267.980011  279.079987  268.089996  27549300.0
1921    2022-08-29  267.399994  263.850006  265.850006  265.230011  20338500.0
1922    2022-08-30  267.049988  260.660004  266.670013  262.970001  22767100.0
1923    2022-08-31  267.109985  261.329987  265.390015  261.470001  24791800.0
1924    2022-09-01  260.890015  255.410004  258.869995  260.399994  23263400.0
```

```
Adj Close
0      40.786396
1      40.576340
2      40.226257
3      39.806129
4      40.471313
...      ...
1920    268.089996
1921    265.230011
1922    262.970001
1923    261.470001
1924    260.399994
```

```
[1925 rows x 7 columns]
```

```
      Date      High      Low      Open      Close      Volume \
0  2015-01-12  47.540001  46.360001  47.419998  46.599998  23651900.0
1  2015-01-13  47.910000  46.060001  46.970001  46.360001  35270600.0
2  2015-01-14  46.240002  45.619999  45.959999  45.959999  29719600.0
3  2015-01-15  46.380001  45.410000  46.220001  45.480000  32750800.0
4  2015-01-16  46.279999  45.169998  45.310001  46.240002  35695300.0
```

```
Adj Close
0      40.786396
1      40.576340
2      40.226257
3      39.806129
4      40.471313
```

```
training_set = dataset_train.iloc[:,1:2].values
print('shape is {}'.format(training_set.shape))
print(training_set[0:5])
```

```
shape is =(1925, 1)
[[47.54000092]
 [47.90999985]
 [46.24000168]
 [46.38000107]
 [46.27999878]]
```

```
plt.plot(training_set,color = 'blue',label='Microsoft Stock Price in Test set')
plt.xlabel('Time')
plt.ylabel('Microsoft Stock Price')
plt.legend()
plt.show()
```

