Code

```python
In [2]: import pandas as pd
        import numpy as np
        import matplotlib.pyplot as plt
        %matplotlib inline
        from sklearn.model_selection import train_test_split
        from sklearn.linear_model import LinearRegression
        from sklearn import metrics
```
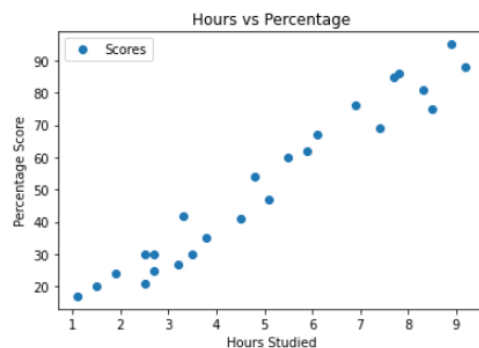
```python
In [8]: dataset = pd.read_csv('student-scores.csv')
        dataset.shape
        dataset.head()
        dataset.describe()
```

Out[8]:

	Hours	Scores
count	25.000000	25.000000
mean	5.012000	51.480000
std	2.525094	25.286887
min	1.100000	17.000000
25%	2.700000	30.000000
50%	4.800000	47.000000
75%	7.400000	75.000000
max	9.200000	95.000000

```python
In [9]: dataset.plot(x='Hours', y='Scores', style='o')
        plt.title('Hours vs Percentage')
        plt.xlabel('Hours Studied')
        plt.ylabel('Percentage Score')
        plt.show()
```



```python
In [10]: X = dataset.iloc[:, :-1].values
         Y = dataset.iloc[:, 1].values
```

```python
In [11]: trainX, testX, trainY, testY = train_test_split(X, Y, test_size=0.2, random_state=0)
```

```python
In [12]: regressor = LinearRegression()
         regressor.fit(trainX, trainY)
```

Out[12]:
```
▾ LinearRegression

LinearRegression()
```

```python
In [13]: print(regressor.intercept_)
```

```
2.0181600414346974
```

```python
In [14]: print(regressor.coef_)
```

```
[9.91065648]
```

```python
In [29]: predY = regressor.predict(testX)
         df = pd.DataFrame({'Actual': y_test, 'Predicted': y_pred})
         df
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
```

```
Input In [29], in <cell line: 2>()
      1 predY = regressor.predict(testX)
----> 2 df = pd.DataFrame({'Actual': y_test, 'Predicted': y_pred})
      3 df

NameError: name 'y_test' is not defined
```

```
In [25]:  print('Mean Absolute Error:', metrics.mean_absolute_error(testY, predY))
          print('Mean Squared Error:', metrics.mean_squared_error(testY, predY))
          print('Root Mean Squared Error:', np.sqrt(metrics.mean_squared_error(testY, predY)))

          Mean Absolute Error: 4.183859899002975
          Mean Squared Error: 21.598769307217406
          Root Mean Squared Error: 4.647447612100367
```