Name: Aaftab aalam Mohammad Harun Khan

Roll No: 19CO23

Experiment: 01

Aim: To Implement Linear Regrassion Using Single Variable

```
#importing the python libraries
import pandas as pd
import numpy as np
import os
import matplotlib.pyplot as plt
from sklearn import linear_model


df1 = pd.read_csv("canada_pci.csv")    #reading the canada_pic.csv fiile using pandas data fr


#Assining the axis name
plt.xlabel("Year")
plt.ylabel("Per Capita Income")
plt.scatter(df1.year, df1.pci)

reg1 = linear_model.LinearRegression()
reg1.fit(df1[['year']], df1.pci)

reg1.predict([[2021]])
#axis labels
plt.xlabel("Year")
plt.ylabel("Per Capita Income")
plt.scatter(df1.year, df1.pci)    #ploting the graph
plt.plot(df1.year, reg1.predict(df1[['year']]), color='red')    #defining the colour of regre
```
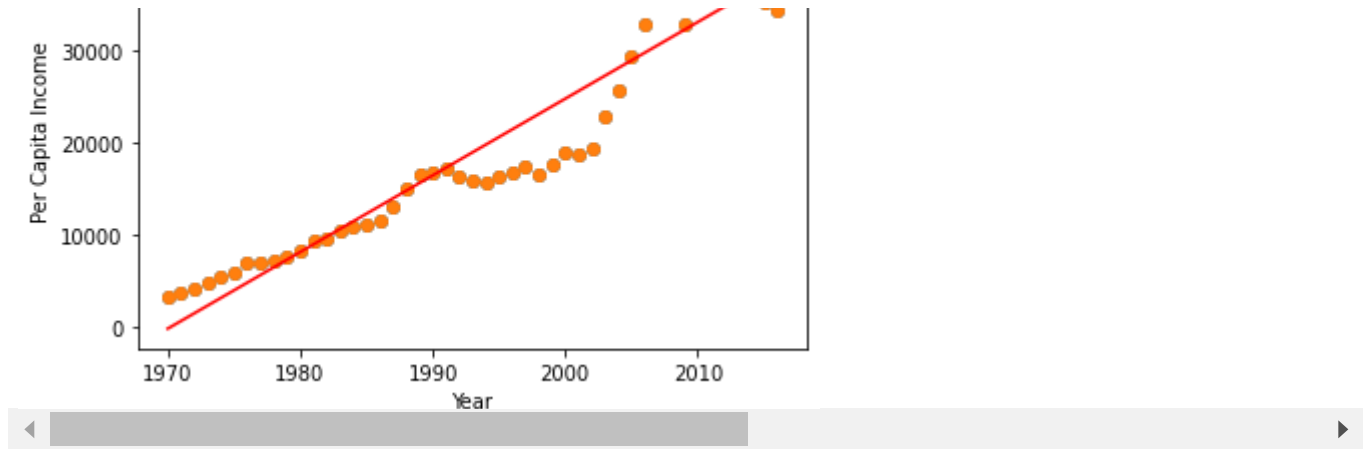
```
/usr/local/lib/python3.7/dist-packages/sklearn/base.py:451: UserWarning: X does not have
  "X does not have valid feature names, but"
```

New Section