

```
In [39]: #import required libraries
import pandas as pd
import numpy as np
from sklearn import linear_model
import matplotlib.pyplot as plt

data=pd.read_csv('INDIA.csv')
data.head(5) #View first 5 row Eyeballing
```

Out[39]:

	YEAR	INCOME
0	2011	1450
1	2012	1500
2	2013	1566
3	2014	1690
4	2015	1800

```
In [40]: data.describe()
```

Out[40]:

	YEAR	INCOME
count	8.00000	8.000000
mean	2014.50000	1761.375000
std	2.44949	248.310829
min	2011.00000	1450.000000
25%	2012.75000	1549.500000

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Out[40]:

	YEAR	INCOME
count	8.00000	8.000000
mean	2014.50000	1761.375000
std	2.44949	248.310829
min	2011.00000	1450.000000
25%	2012.75000	1549.500000
50%	2014.50000	1745.000000
75%	2016.25000	1987.000000
max	2018.00000	2099.000000

In [8]: data.dtypes *#check which data type*

Out[8]: YEAR int64
INCOME int64
dtype: object

In [41]: *#Visualication of data*
%matplotlib inline
plt.scatter(data.YEAR,data.INCOME,COLOR='green',marker='+')
plt.xlabel("Years")
plt.ylabel("Income in us \$ ")

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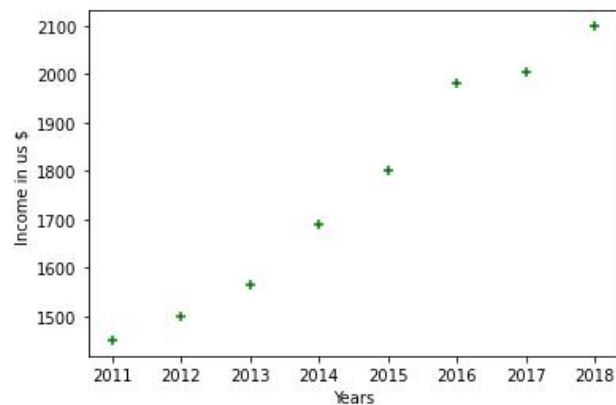
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Run Code

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```
<ipython-input-41-b67261b94e31>:3: MatplotlibDeprecationWarning: Case-insensitive properties were deprecated in 3.3 and support
will be removed two minor releases later
plt.scatter(data.YEAR,data.INCOME,COLOR='green',marker='+')
```

Out[41]: Text(0, 0.5, 'Income in us \$ ')



```
In [42]: reg = linear_model.LinearRegression()
```

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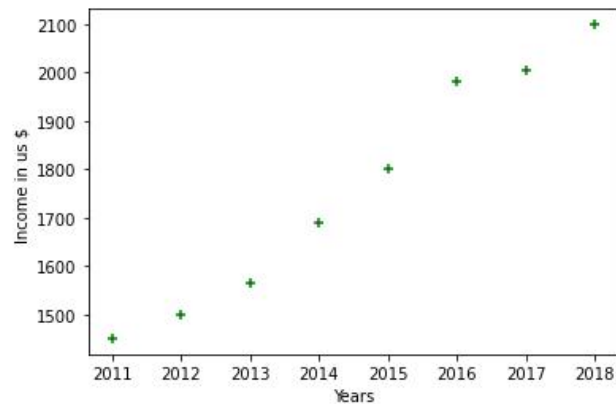
Trusted

Python 3

Code

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Out[41]: Text(0, 0.5, 'Income in us \$')



```
In [42]: reg = linear_model.LinearRegression()  
reg.fit(data[['YEAR']],data.INCOME)
```

Out[42]: LinearRegression()

```
In [44]: reg.predict([[2025]]) #model predicting the per capita income for the year 2025
```

Out[44]: array([2814.25])

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