```python
In [17]:  import numpy as np
          import pandas as pd
```

```python
In [18]:  dict1={'city Name':['toronto','Bathurst','cessnock','Orange','Tamworth','Liverpool
                  'per capita income':['8.6','9.3','10.1','8.0','8.3','8.7'],
                   'Death rate for 1000 residents':['8.4','7.6','5.4','10.6','8.3','9.3']}
          df=pd.DataFrame(dict1)
          df
```

Out[18]:

	city Name	per capita income	Death rate for 1000 residents
0	toronto	8.6	8.4
1	Bathurst	9.3	7.6
2	cessnock	10.1	5.4
3	Orange	8.0	10.6
4	Tamworth	8.3	8.3
5	Liverpool	8.7	9.3

```python
In [61]:  x=['per capita income']
          y=['Death rate for 1000 residents']
```

```python
In [62]:  len(x),len(y)
```

Out[62]: (1, 1)

```python
In [63]:  x1=df[['per capita income']]
          y1=df['Death rate for 1000 residents']
```

```python
In [64]:  from sklearn.linear_model import LinearRegression
          lr=LinearRegression()
```
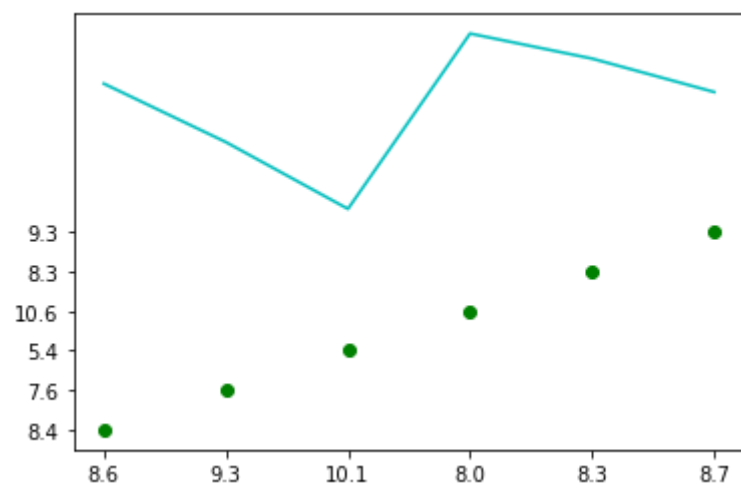
```python
In [65]:  lr.fit(x1,y1)
```

Out[65]: LinearRegression()

```python
In [ ]:  y_predict=lr.predict(x1)
         y_predict
```

```python
In [ ]:  import matplotlib.pyplot as plt
```

```python
In [54]:  plt.scatter(x1['per capita income'],y1,color='g')
          plt.plot(x1['per capita income'],y_predict,color='c')
          plt.legend
          plt.show()
```