```
In [2]:
         import numpy as np
In [3]:
         import pandas as pd
In [5]: df=pd.read_csv('data- linear regression.csv')
         df
In [6]:
             qualification experience previous exp
Out[6]:
                                                   Salary
          0
                       0
                                                   23500
                                   1
                                                5
          1
                                                   24500
          2
                       0
                                   5
                                                   32500
                                                6
          3
                       0
                                                   36500
          4
                       0
                                                   26500
                                   4
                                                2
          5
                                   6
                                                   30500
          6
                       0
                                   6
                                                   34500
                                                6
          7
                       0
                                   7
                                                   34500
          8
                       0
                                  8
                                               10
                                                   42500
                       0
                                   5
          9
                                                   28500
         10
                       0
                                   3
                                                5
                                                   27500
                       0
                                   2
                                                   23500
         11
         12
                       0
                                  4
                                                   28500
         13
                       0
                                   6
                                                2
                                                   30500
         14
                       1
                                   1
                                                5
                                                   73000
         15
                                   3
                                                   73000
         16
                       1
                                   5
                                                6
                                                   87000
         17
                                                   92000
         18
                       1
                                   4
                                                5
                                                   82000
                                   6
         19
                                                   84000
                       1
         20
                                   6
                                                   86000
         21
                                                   89000
         22
                       1
                                   8
                                               10
                                                  104000
         23
                                   5
                                                   79000
```

```
In [7]: x=['qualification','experience']
          y=['Salary']
 In [8]: x1=df[['qualification','experience']]
          y1=df['Salary']
         from sklearn.linear model import LinearRegression
 In [9]:
          lr=LinearRegression()
         lr.fit(x1,y1)
In [10]:
         LinearRegression()
Out[10]:
         y_predict=lr.predict(x1)
In [11]:
         y_predict
Out[11]: array([19175.87622356, 24936.53299653, 30697.1897695, 39338.17492895,
                 27816.86138301, 33577.51815598, 33577.51815598, 36457.84654247,
                 39338.17492895, 30697.1897695 , 24936.53299653, 22056.20461004,
                 27816.86138301, 33577.51815598, 71604.04167982, 77364.69845279,
                 83125.35522577, 91766.34038522, 80245.02683928, 86005.68361225,
                 86005.68361225, 88886.01199874, 91766.34038522, 83125.35522577,
                 77364.69845279, 74484.37006631, 80245.02683928, 86005.68361225,
                 86005.68361225])
In [12]:
          import matplotlib.pyplot as plt
         plt.scatter(x1['qualification'],y1,color='g')
In [22]:
          plt.plot(x1['qualification'],y_predict,color ='c')
          plt.legend
          plt.show()
          100000
           80000
           60000
           40000
           20000
                          0.2
                                   0.4
                                           0.6
                                                    0.8
                                                             1.0
```