03-11-2025

In [27]:

```
#Import numpy
import numpy as np

#Seasons
Seasons = ["2015","2016","2017","2018","2019","2020","2021","2022","2023","2024"]
Sdict = {"2015":0,"2016":1,"2017":2,"2018":3,"2019":4,"2020":5,"2021":6,"2022":7,"2

#Players
Players = ["Sachin","Rahul","Smith","Sami","Pollard","Morris","Samson","Dhoni","Koh
Pdict = {"Sachin":0,"Rahul":1,"Smith":2,"Sami":3,"Pollard":4,"Morris":5,"Samson":6,

#Salaries
Sachin_Salary = [15946875,17718750,19490625,21262500,23034375,24806250,25244493,278
Rahul_Salary = [12000000,12744189,13488377,14232567,14976754,16324500,18038573,1975
Smith_Salary = [4621800,5828090,13041250,14410581,15779912,14500000,16022500,175450
Sami_Salary = [3713640,4694041,13041250,14410581,15779912,17149243,18518574,1945000
Pollard_Salary = [4493160,4806720,6061274,13758000,15202590,16647180,18091770,19536
Morris_Salary = [3348000,4235220,12455000,14410581,15779912,14500000,16022500,17545
Samson_Salary = [3144240,3380160,3615960,4574189,13520500,14940153,16359805,1777945
Dhoni_Salary = [0,0,4171200,4484040,4796880,6053663,15506632,16669630,17832627,1899
Kohli_Salary = [0,0,0,4822800,5184480,5546160,6993708,16402500,17632688,18862875]
Sky_Salary = [3031920,3841443,13041250,14410581,15779912,14200000,15691000,17182000
#Matrix
Salary = np.array([Sachin_Salary, Rahul_Salary, Smith_Salary, Sami_Salary, Pollard_

#Games
Sachin_G = [80,77,82,82,73,82,58,78,6,35]
Rahul_G = [82,57,82,79,76,72,60,72,79,80]
Smith_G = [79,78,75,81,76,79,62,76,77,69]
Sami_G = [80,65,77,66,69,77,55,67,77,40]
Pollard_G = [82,82,82,79,82,78,54,76,71,41]
Morris_G = [70,69,67,77,70,77,57,74,79,44]
Samson_G = [78,64,80,78,45,80,60,70,62,82]
Dhoni_G = [35,35,80,74,82,78,66,81,81,27]
Kohli_G = [40,40,40,81,78,81,39,0,10,51]
Sky_G = [75,51,51,79,77,76,49,69,54,62]
#Matrix
Games = np.array([Sachin_G, Rahul_G, Smith_G, Sami_G, Pollard_G, Morris_G, Samson_G

#Points
Sachin_PTS = [2832,2430,2323,2201,1970,2078,1616,2133,83,782]
Rahul_PTS = [1653,1426,1779,1688,1619,1312,1129,1170,1245,1154]
Smith_PTS = [2478,2132,2250,2304,2258,2111,1683,2036,2089,1743]
Sami_PTS = [2122,1881,1978,1504,1943,1970,1245,1920,2112,966]
Pollard_PTS = [1292,1443,1695,1624,1503,1784,1113,1296,1297,646]
Morris_PTS = [1572,1561,1496,1746,1678,1438,1025,1232,1281,928]
Samson_PTS = [1258,1104,1684,1781,841,1268,1189,1186,1185,1564]
Dhoni_PTS = [903,903,1624,1871,2472,2161,1850,2280,2593,686]
Kohli_PTS = [597,597,597,1361,1619,2026,852,0,159,904]
Sky_PTS = [2040,1397,1254,2386,2045,1941,1082,1463,1028,1331]
```

```
#Matrix
Points = np.array([Sachin_PTS, Rahul_PTS, Smith_PTS, Sami_PTS, Pollard_PTS, Morris_
```

In [28]:
```
Salary
```

Out[28]:
```
array([[15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
         25244493, 27849149, 30453805, 23500000],
        [12000000, 12744189, 13488377, 14232567, 14976754, 16324500,
         18038573, 19752645, 21466718, 23180790],
        [ 4621800,  5828090, 13041250, 14410581, 15779912, 14500000,
         16022500, 17545000, 19067500, 20644400],
        [ 3713640,  4694041, 13041250, 14410581, 15779912, 17149243,
         18518574, 19450000, 22407474, 22458000],
        [ 4493160,  4806720,  6061274, 13758000, 15202590, 16647180,
         18091770, 19536360, 20513178, 21436271],
        [ 3348000,  4235220, 12455000, 14410581, 15779912, 14500000,
         16022500, 17545000, 19067500, 20644400],
        [ 3144240,  3380160,  3615960,  4574189, 13520500, 14940153,
         16359805, 17779458, 18668431, 20068563],
        [       0,        0,  4171200,  4484040,  4796880,  6053663,
         15506632, 16669630, 17832627, 18995624],
        [       0,        0,        0,  4822800,  5184480,  5546160,
          6993708, 16402500, 17632688, 18862875],
        [ 3031920,  3841443, 13041250, 14410581, 15779912, 14200000,
         15691000, 17182000, 18673000, 15000000]])
```

In [29]:
```
Games
```

Out[29]:
```
array([[80, 77, 82, 82, 73, 82, 58, 78,  6, 35],
        [82, 57, 82, 79, 76, 72, 60, 72, 79, 80],
        [79, 78, 75, 81, 76, 79, 62, 76, 77, 69],
        [80, 65, 77, 66, 69, 77, 55, 67, 77, 40],
        [82, 82, 82, 79, 82, 78, 54, 76, 71, 41],
        [70, 69, 67, 77, 70, 77, 57, 74, 79, 44],
        [78, 64, 80, 78, 45, 80, 60, 70, 62, 82],
        [35, 35, 80, 74, 82, 78, 66, 81, 81, 27],
        [40, 40, 40, 81, 78, 81, 39,  0, 10, 51],
        [75, 51, 51, 79, 77, 76, 49, 69, 54, 62]])
```

In [30]:
```
Points
```

Out[30]:
```
array([[2832, 2430, 2323, 2201, 1970, 2078, 1616, 2133,   83,  782],
        [1653, 1426, 1779, 1688, 1619, 1312, 1129, 1170, 1245, 1154],
        [2478, 2132, 2250, 2304, 2258, 2111, 1683, 2036, 2089, 1743],
        [2122, 1881, 1978, 1504, 1943, 1970, 1245, 1920, 2112,  966],
        [1292, 1443, 1695, 1624, 1503, 1784, 1113, 1296, 1297,  646],
        [1572, 1561, 1496, 1746, 1678, 1438, 1025, 1232, 1281,  928],
        [1258, 1104, 1684, 1781,  841, 1268, 1189, 1186, 1185, 1564],
        [ 903,  903, 1624, 1871, 2472, 2161, 1850, 2280, 2593,  686],
        [ 597,  597,  597, 1361, 1619, 2026,  852,    0,  159,  904],
        [2040, 1397, 1254, 2386, 2045, 1941, 1082, 1463, 1028, 1331]])
```

In [31]:
```
Sdict
```

```
Out[31]: {'2015': 0,
          '2016': 1,
          '2017': 2,
          '2018': 3,
          '2019': 4,
          '2020': 5,
          '2021': 6,
          '2022': 7,
          '2023': 8,
          '2024': 9}
```

```
In [32]: Pdict
```

```
Out[32]: {'Sachin': 0,
          'Rahul': 1,
          'Smith': 2,
          'Sami': 3,
          'Pollard': 4,
          'Morris': 5,
          'Samson': 6,
          'Dhoni': 7,
          'Kohli': 8,
          'Sky': 9}
```

```
In [33]: Games
```

```
Out[33]: array([[80, 77, 82, 82, 73, 82, 58, 78,  6, 35],
                [82, 57, 82, 79, 76, 72, 60, 72, 79, 80],
                [79, 78, 75, 81, 76, 79, 62, 76, 77, 69],
                [80, 65, 77, 66, 69, 77, 55, 67, 77, 40],
                [82, 82, 82, 79, 82, 78, 54, 76, 71, 41],
                [70, 69, 67, 77, 70, 77, 57, 74, 79, 44],
                [78, 64, 80, 78, 45, 80, 60, 70, 62, 82],
                [35, 35, 80, 74, 82, 78, 66, 81, 81, 27],
                [40, 40, 40, 81, 78, 81, 39,  0, 10, 51],
                [75, 51, 51, 79, 77, 76, 49, 69, 54, 62]])
```

```
In [34]: Games[5]
```

```
Out[34]: array([70, 69, 67, 77, 70, 77, 57, 74, 79, 44])
```

```
In [35]: Games[5,3]
```

```
Out[35]: np.int64(77)
```

```
In [36]: Salary
```

```
Out[36]: array([[15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
                 25244493, 27849149, 30453805, 23500000],
                [12000000, 12744189, 13488377, 14232567, 14976754, 16324500,
                 18038573, 19752645, 21466718, 23180790],
                [ 4621800,  5828090, 13041250, 14410581, 15779912, 14500000,
                 16022500, 17545000, 19067500, 20644400],
                [ 3713640,  4694041, 13041250, 14410581, 15779912, 17149243,
                 18518574, 19450000, 22407474, 22458000],
                [ 4493160,  4806720,  6061274, 13758000, 15202590, 16647180,
                 18091770, 19536360, 20513178, 21436271],
                [ 3348000,  4235220, 12455000, 14410581, 15779912, 14500000,
                 16022500, 17545000, 19067500, 20644400],
                [ 3144240,  3380160,  3615960,  4574189, 13520500, 14940153,
                 16359805, 17779458, 18668431, 20068563],
                [       0,        0,  4171200,  4484040,  4796880,  6053663,
                 15506632, 16669630, 17832627, 18995624],
                [       0,        0,        0,  4822800,  5184480,  5546160,
                  6993708, 16402500, 17632688, 18862875],
                [ 3031920,  3841443, 13041250, 14410581, 15779912, 14200000,
                 15691000, 17182000, 18673000, 15000000]])
```

```
In [37]: Salary[0]
```

```
Out[37]: array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
                25244493, 27849149, 30453805, 23500000])
```

```
In [38]: Games[0]
```

```
Out[38]: array([80, 77, 82, 82, 73, 82, 58, 78,  6, 35])
```

```
In [39]: Salary[0] / Games[0]
```

```
Out[39]: array([ 199335.9375    ,  230113.63636364,  237690.54878049,
                 259298.7804878 ,  315539.38356164,  302515.24390244,
                 435249.87931034,  357040.37179487, 5075634.16666667,
                 671428.57142857])
```

```
In [40]: np.round(Salary[0] / Games[0])
```

```
Out[40]: array([ 199336.,  230114.,  237691.,  259299.,  315539.,  302515.,
                 435250.,  357040., 5075634.,  671429.])
```

Lets visualize the data

```
In [41]: import warnings
         warnings.filterwarnings('ignore')
         # to ignore OS unwanted error write the code as ignore all
```

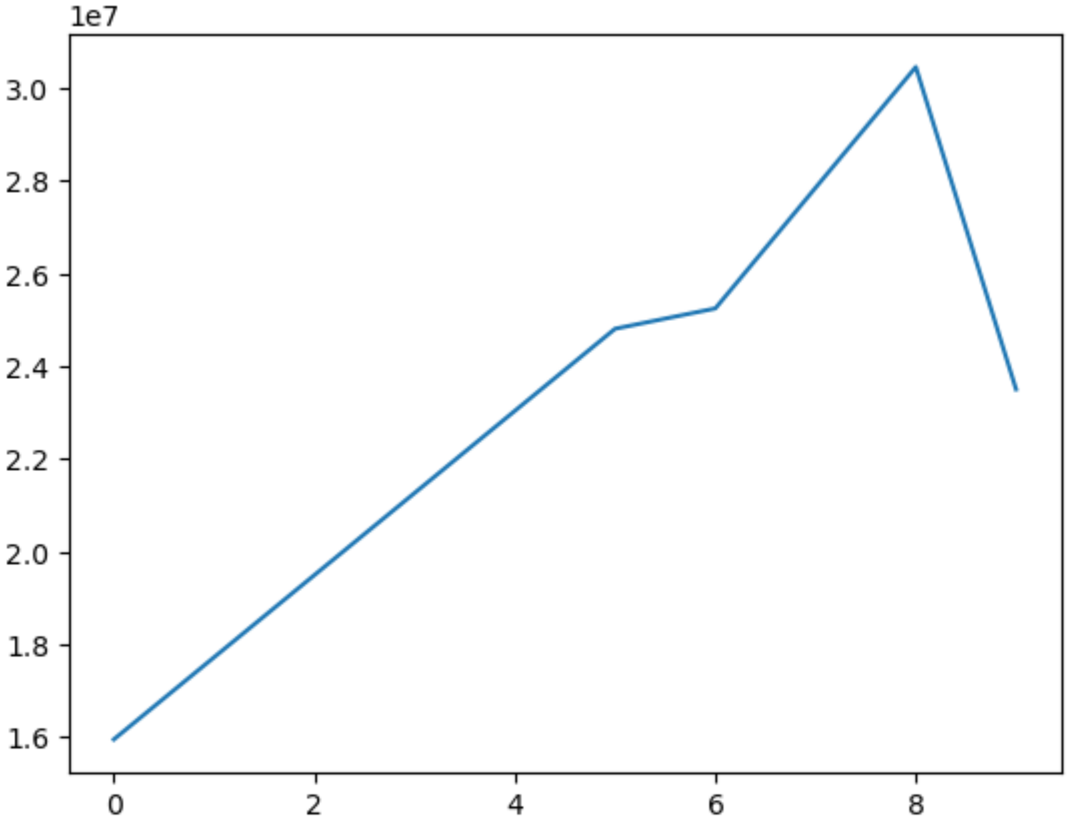
```
In [42]: import matplotlib.pyplot as plt
```

```
In [43]: Salary[0]
```

```
Out[43]: array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
                25244493, 27849149, 30453805, 23500000])
```

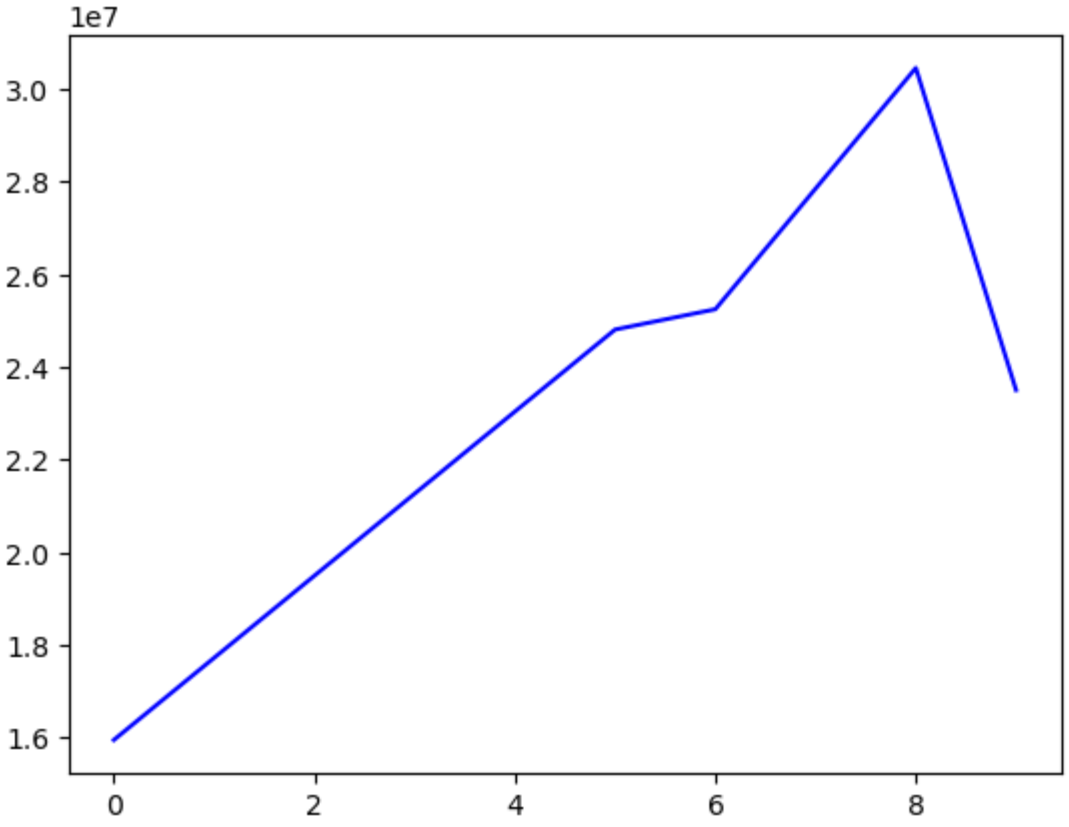
In [44]:
```
plt.plot(Salary[0])
```

Out[44]:
```
[<matplotlib.lines.Line2D at 0x16db42f34d0>]
```



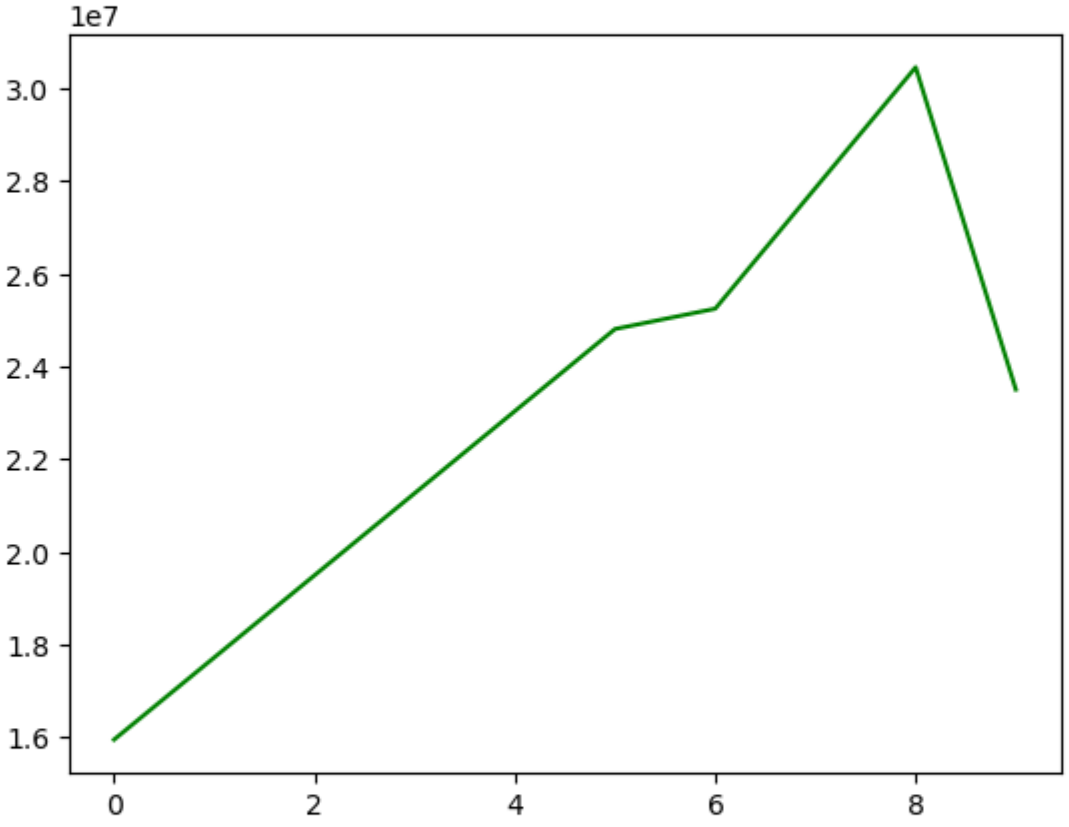
In [45]:
```
plt.plot(Salary[0], color = 'blue')
```

Out[45]:
```
[<matplotlib.lines.Line2D at 0x16db4359a90>]
```



```
In [46]: plt.plot(Salary[0], color = 'Green')
```

```
Out[46]: [<matplotlib.lines.Line2D at 0x16db43c0050>]
```

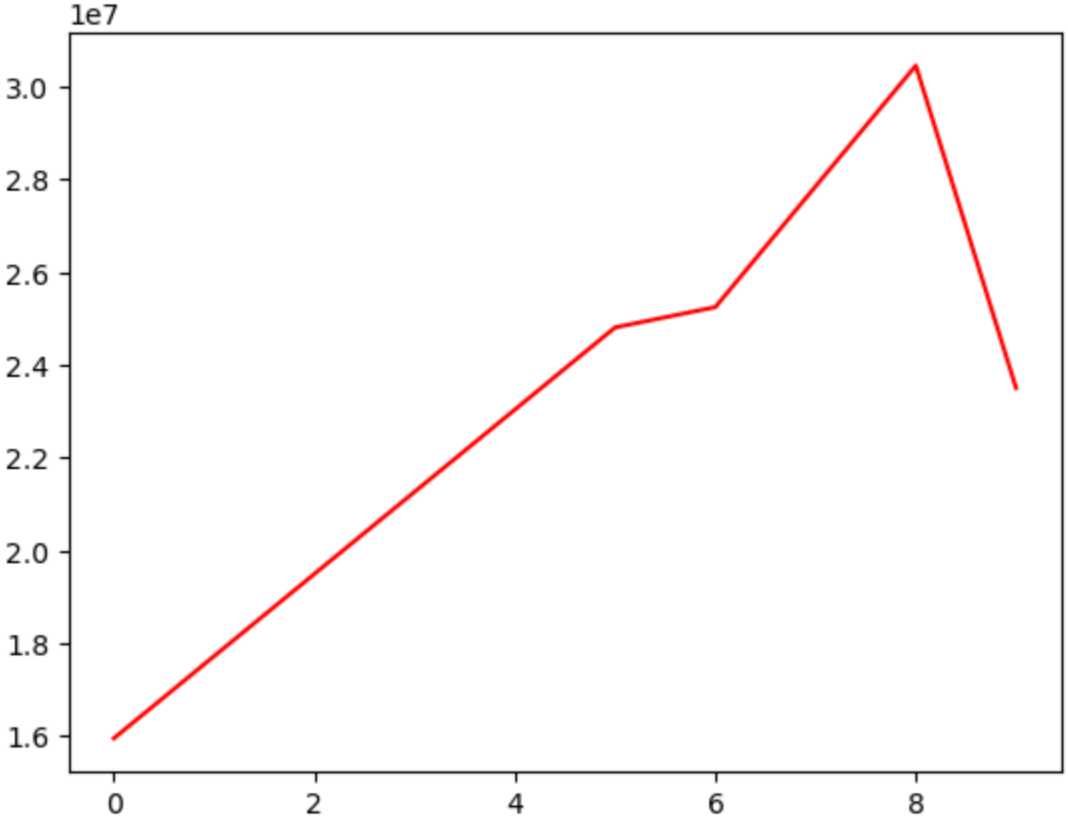


In [47]:

```
plt.plot(Salary[0], c = 'r')
```

Out[47]:

```
[<matplotlib.lines.Line2D at 0x16db440e5d0>]
```

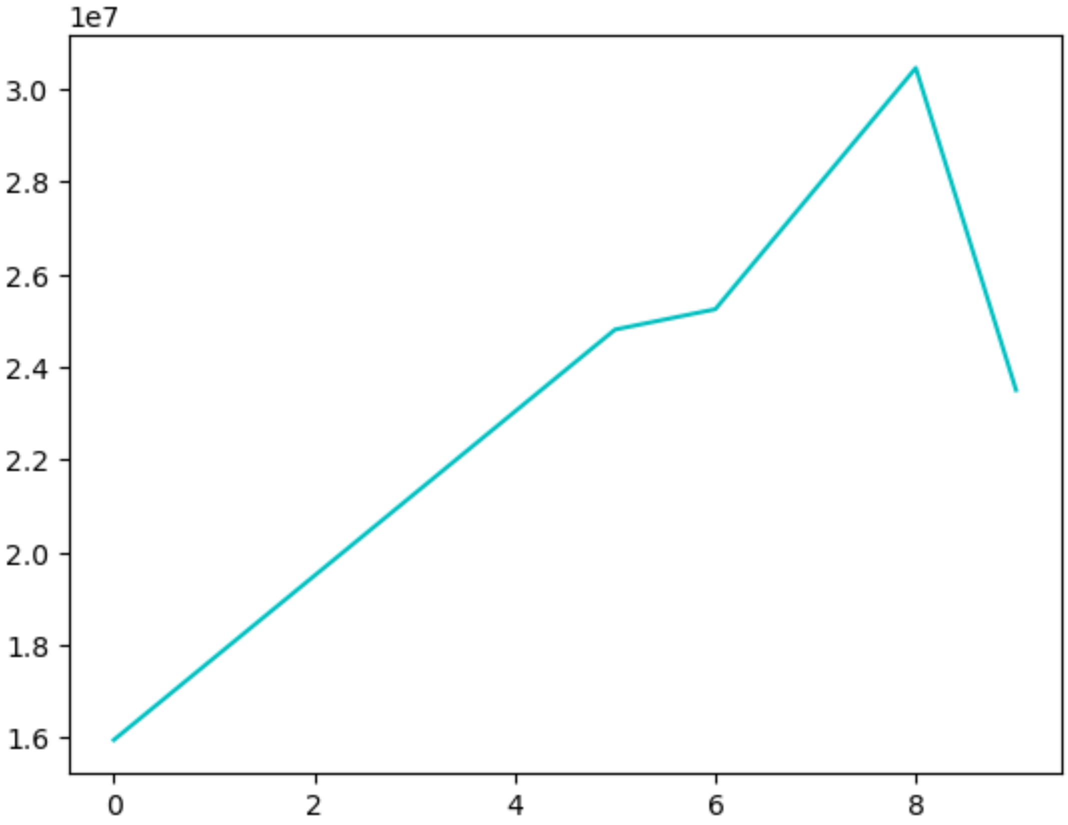


In [48]:

```
plt.plot(Salary[0], c = 'c')
```

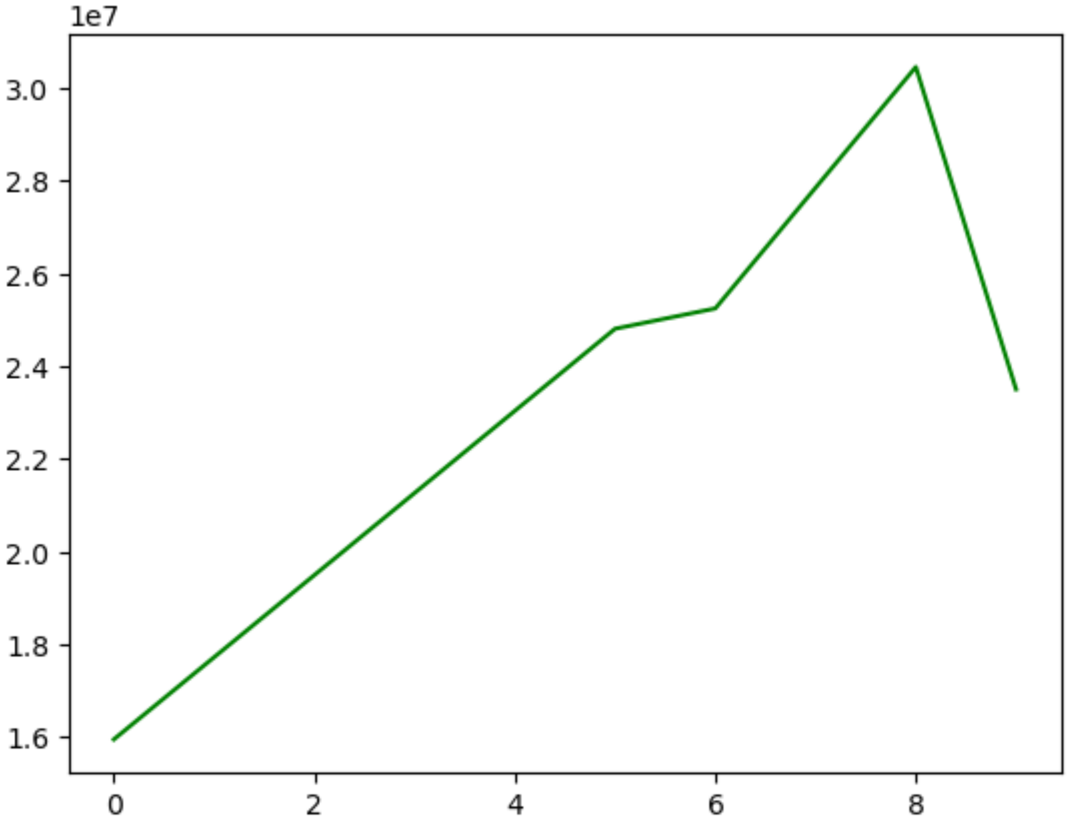
Out[48]:

```
[<matplotlib.lines.Line2D at 0x16db4150b90>]
```



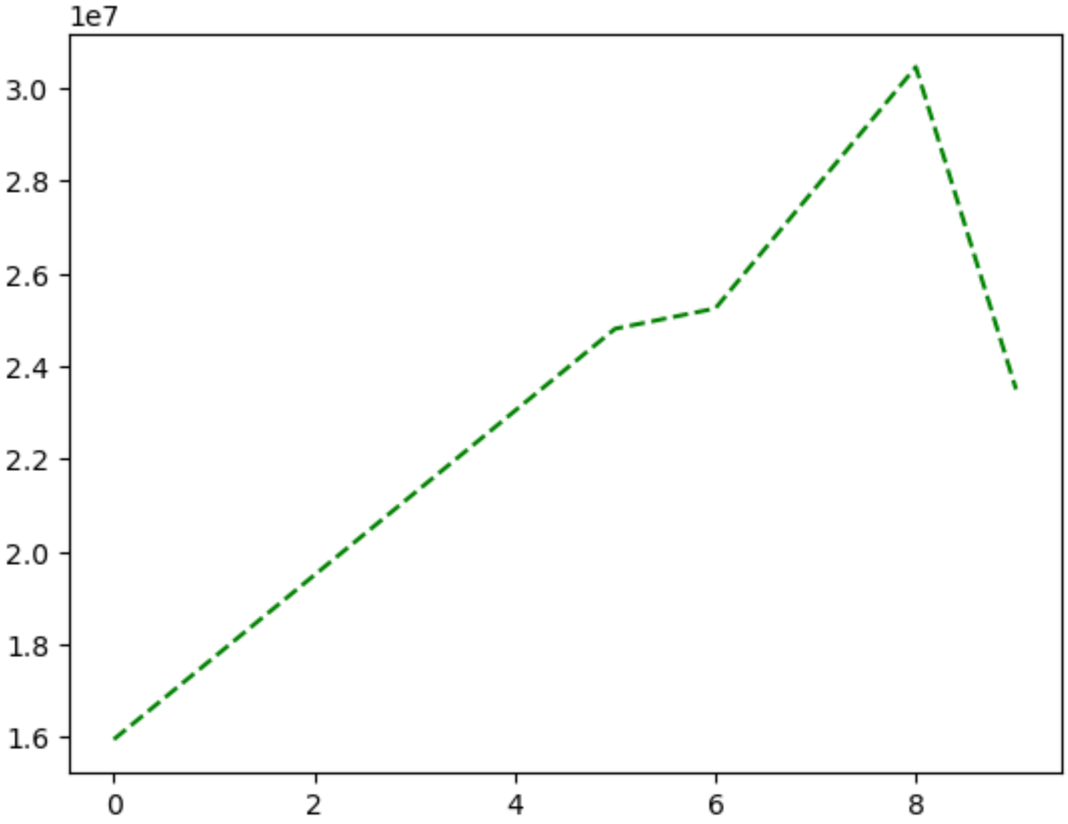
```
In [49]: plt.plot(Salary[0], c = 'g')
```

```
Out[49]: [<matplotlib.lines.Line2D at 0x16db41b3110>]
```



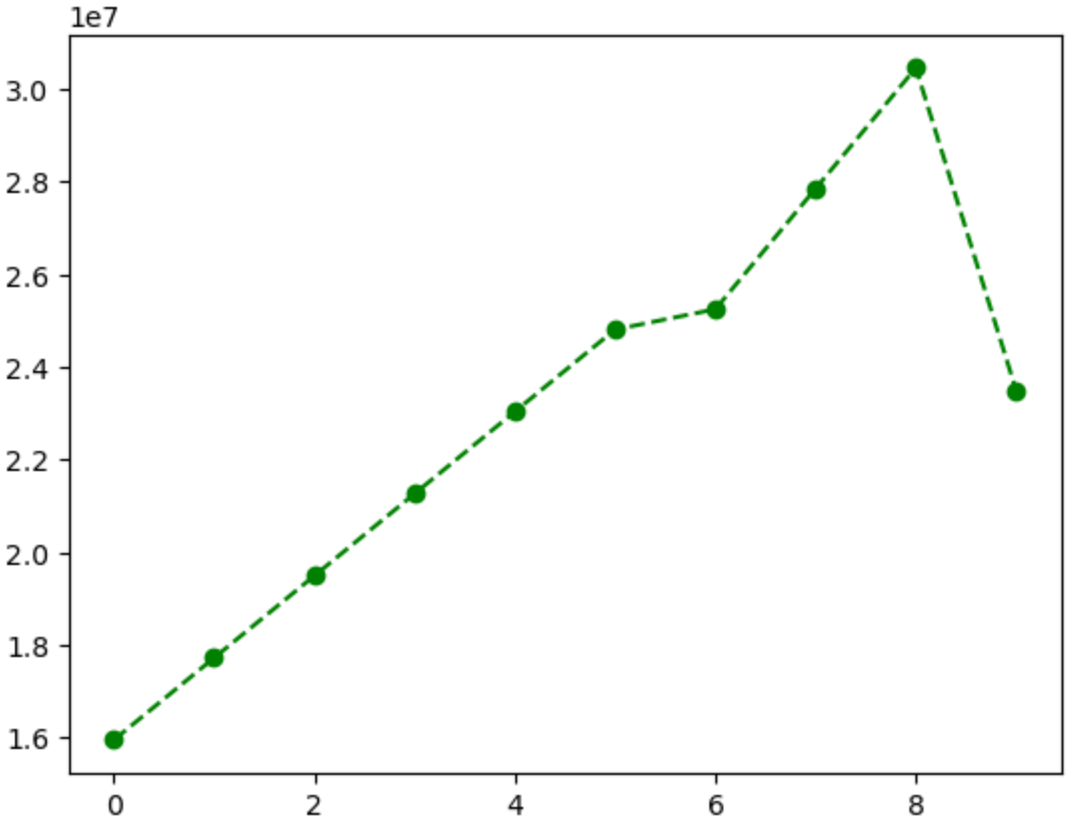
```
In [50]: plt.plot(Salary[0], c = 'g', ls = '--')
```

```
Out[50]: [<matplotlib.lines.Line2D at 0x16db44756d0>]
```



```
In [51]: plt.plot(Salary[0], c = 'g', ls = '--', marker = 'o')
```

```
Out[51]: [<matplotlib.lines.Line2D at 0x16db44d7c50>]
```



```
In [52]: Games
```

```
Out[52]: array([[80, 77, 82, 82, 73, 82, 58, 78,  6, 35],
                [82, 57, 82, 79, 76, 72, 60, 72, 79, 80],
                [79, 78, 75, 81, 76, 79, 62, 76, 77, 69],
                [80, 65, 77, 66, 69, 77, 55, 67, 77, 40],
                [82, 82, 82, 79, 82, 78, 54, 76, 71, 41],
                [70, 69, 67, 77, 70, 77, 57, 74, 79, 44],
                [78, 64, 80, 78, 45, 80, 60, 70, 62, 82],
                [35, 35, 80, 74, 82, 78, 66, 81, 81, 27],
                [40, 40, 40, 81, 78, 81, 39,  0, 10, 51],
                [75, 51, 51, 79, 77, 76, 49, 69, 54, 62]])
```

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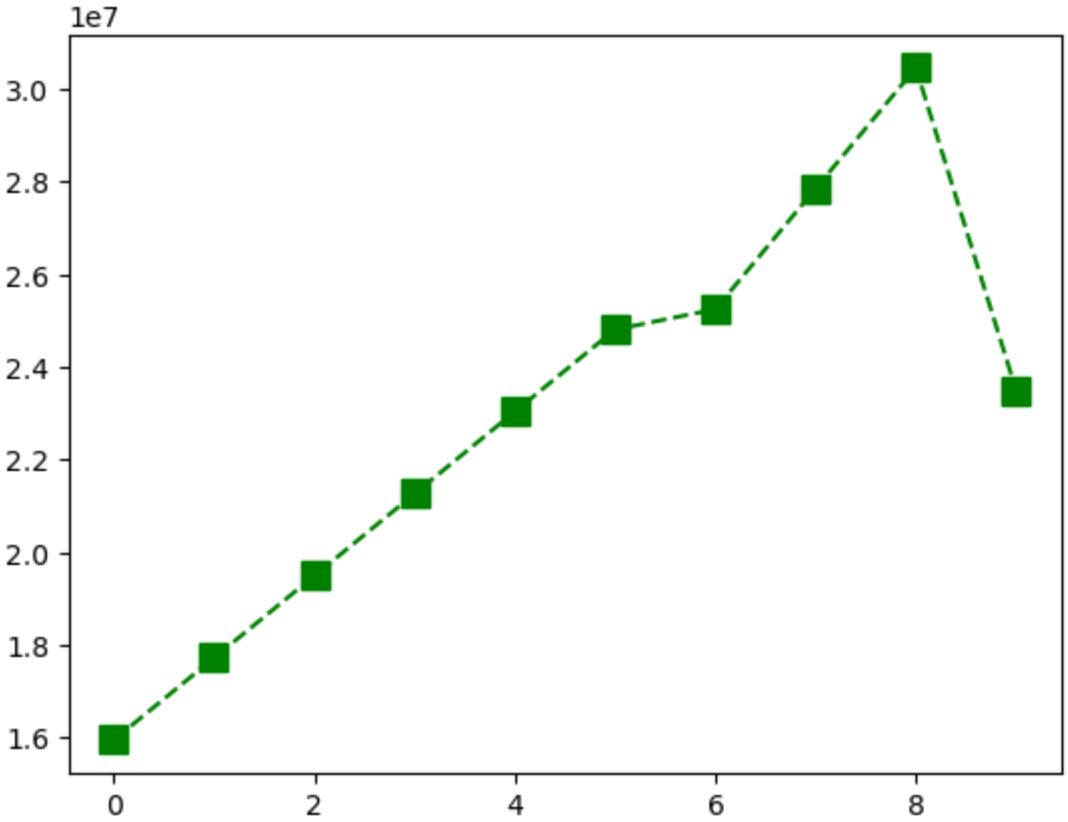
```
In [54]: %matplotlib inline
         plt.rcParms['figure.figsize'] 10,8
```

```
  Cell In[54], line 2
    plt.rcParms['figure.figsize'] 10,8
                                 ^
SyntaxError: invalid syntax
```

```
In [55]: plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 10)
         plt.show()
```



In [56]:
```
list(range(0,10))
```

Out[56]:
```
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
```

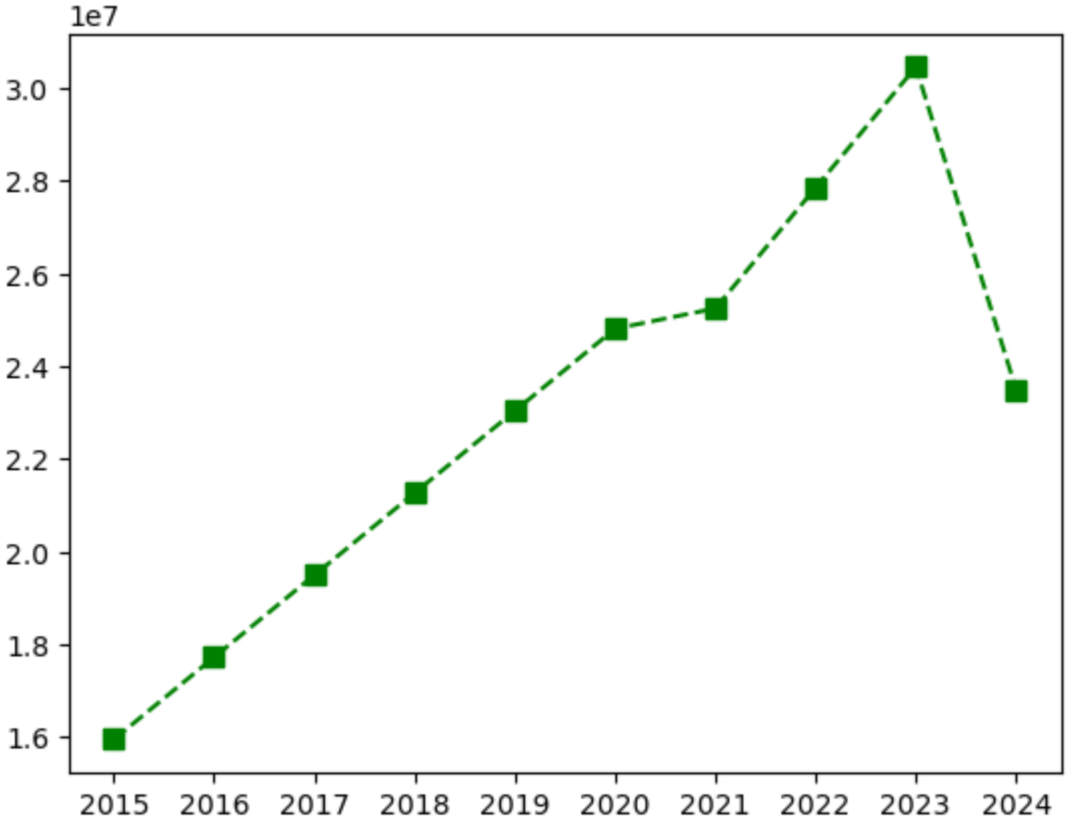
In [57]:
```
Sdict
```

Out[57]:
```
{'2015': 0,
 '2016': 1,
 '2017': 2,
 '2018': 3,
 '2019': 4,
 '2020': 5,
 '2021': 6,
 '2022': 7,
 '2023': 8,
 '2024': 9}
```

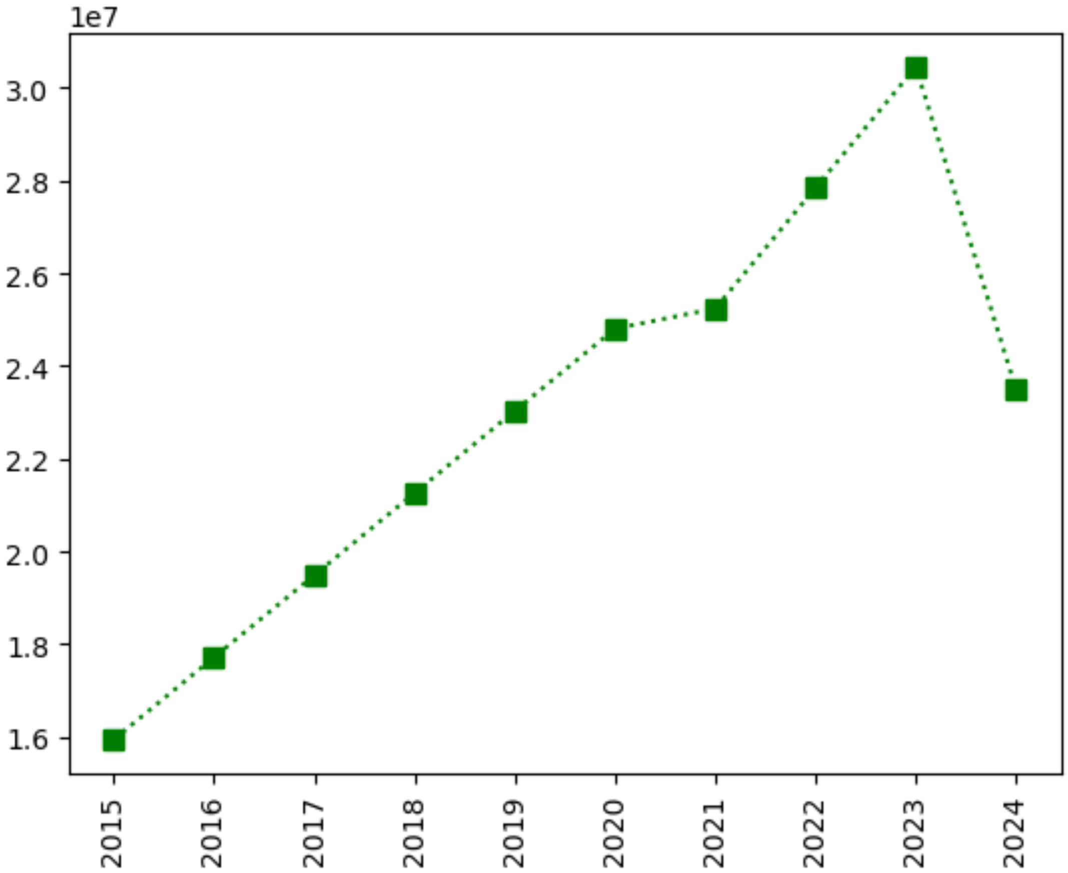
In [58]:
```
Pdict
```

Out[58]:
```
{'Sachin': 0,
 'Rahul': 1,
 'Smith': 2,
 'Sami': 3,
 'Pollard': 4,
 'Morris': 5,
 'Samson': 6,
 'Dhoni': 7,
 'Kohli': 8,
 'Sky': 9}
```

In [59]:
```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7)
plt.xticks(list(range(0,10)), Seasons)
plt.show()
```



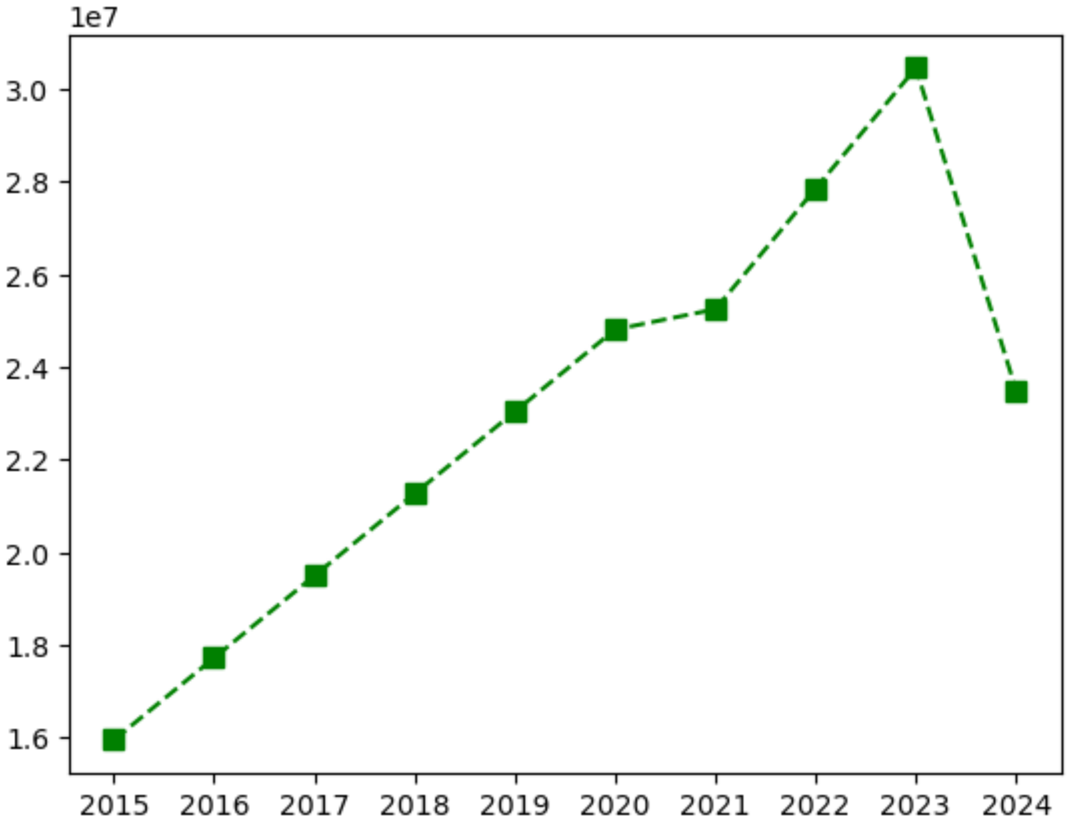
In [60]:
```
plt.plot(Salary[0], c='Green', ls = ':', marker = 's', ms = 7, label = Players[0])
plt.xticks(list(range(0,10)), Seasons,rotation='vertical')
plt.show()
```



In [61]:
```
Games
```

Out[61]:
```
array([[80, 77, 82, 82, 73, 82, 58, 78,  6, 35],
       [82, 57, 82, 79, 76, 72, 60, 72, 79, 80],
       [79, 78, 75, 81, 76, 79, 62, 76, 77, 69],
       [80, 65, 77, 66, 69, 77, 55, 67, 77, 40],
       [82, 82, 82, 79, 82, 78, 54, 76, 71, 41],
       [70, 69, 67, 77, 70, 77, 57, 74, 79, 44],
       [78, 64, 80, 78, 45, 80, 60, 70, 62, 82],
       [35, 35, 80, 74, 82, 78, 66, 81, 81, 27],
       [40, 40, 40, 81, 78, 81, 39,  0, 10, 51],
       [75, 51, 51, 79, 77, 76, 49, 69, 54, 62]])
```

In [62]:
```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
plt.xticks(list(range(0,10)), Seasons,rotation='horizontal')
plt.show()
```



```
In [63]: Salary[0]
```

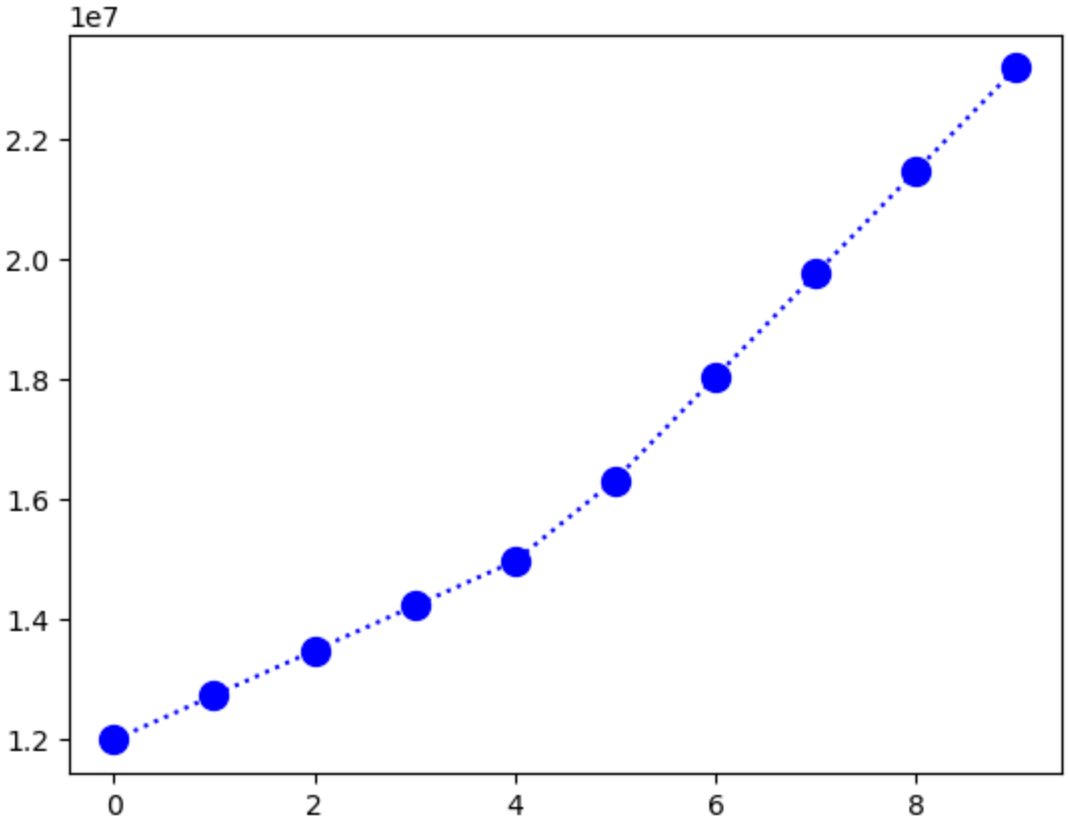
```
Out[63]: array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
                25244493, 27849149, 30453805, 23500000])
```

```
In [64]: Salary[1]
```

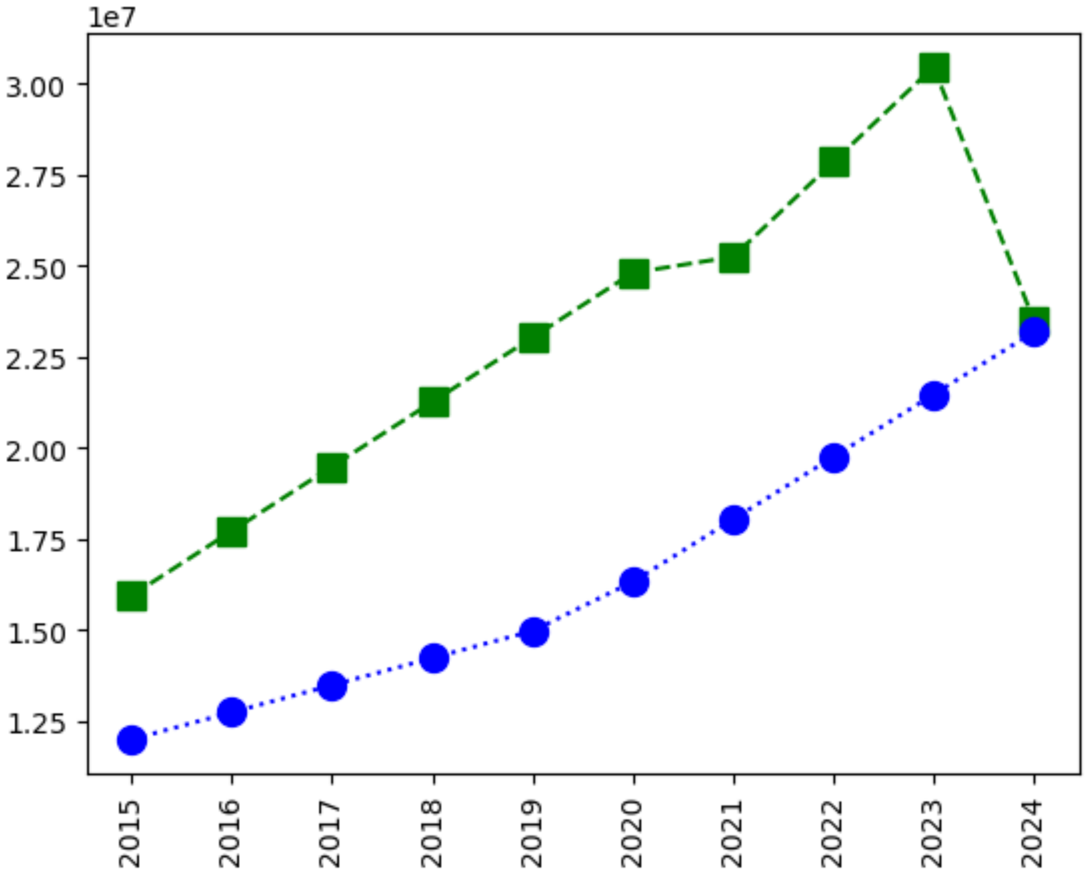
```
Out[64]: array([12000000, 12744189, 13488377, 14232567, 14976754, 16324500,
                18038573, 19752645, 21466718, 23180790])
```

```
In [65]: plt.plot(Salary[1], c='Blue', ls = ':', marker = 'o', ms = 10, label = Players[1])
```

```
Out[65]: [<matplotlib.lines.Line2D at 0x16db567fed0>]
```

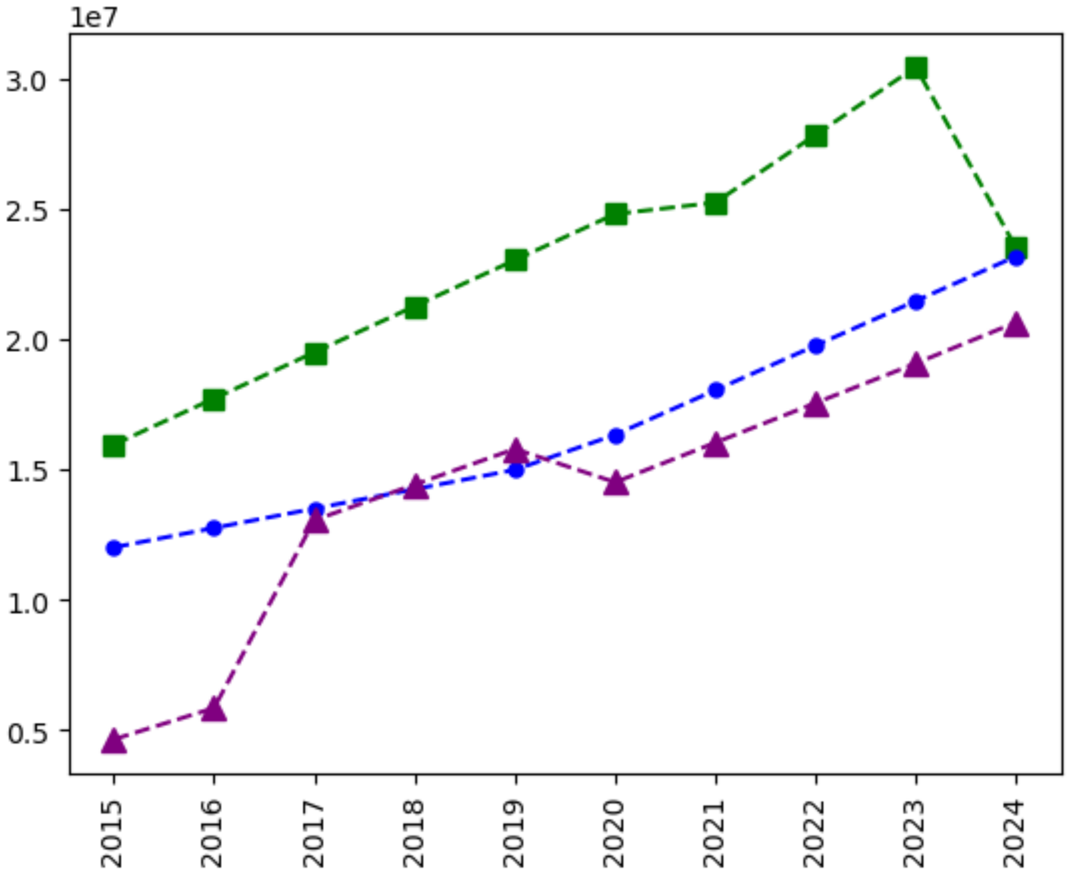


In [66]:
```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 10, label = Players[0]
plt.plot(Salary[1], c='Blue', ls = ':', marker = 'o', ms = 10, label = Players[1])

plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

plt.show()
```



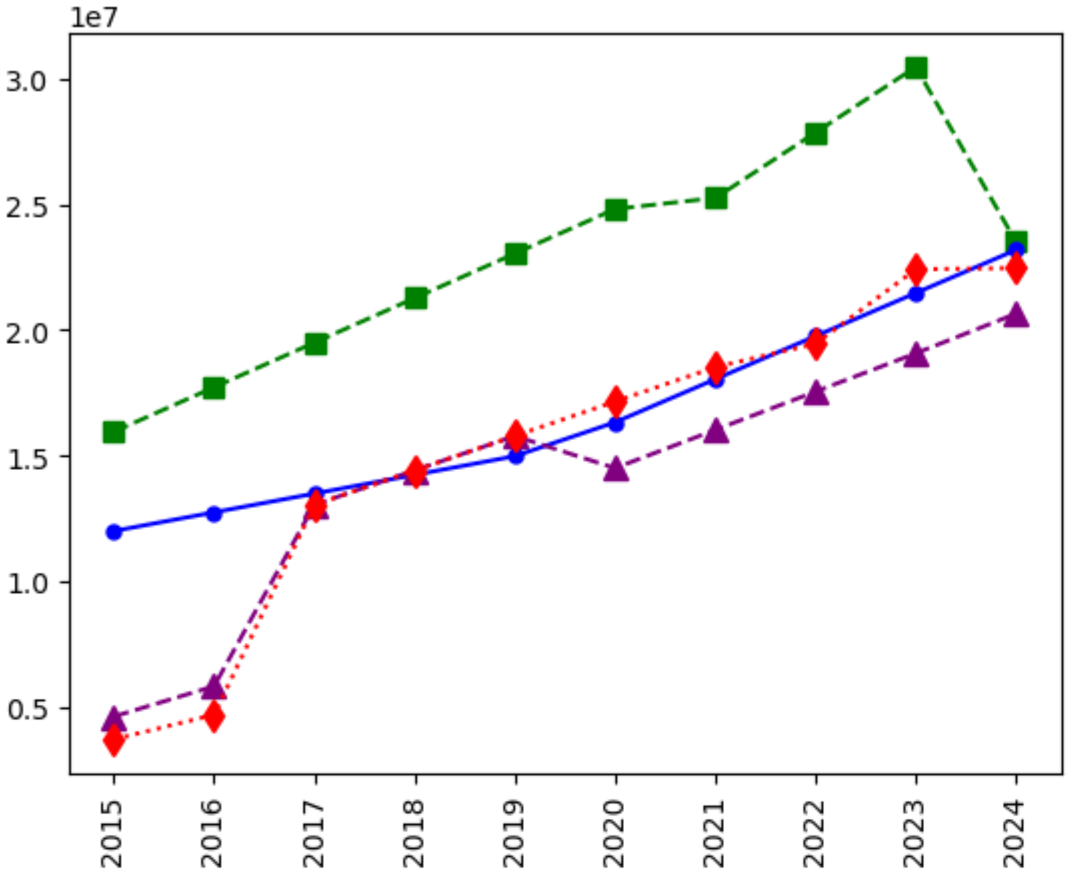
In [67]:

```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
plt.plot(Salary[1], c='Blue', ls = '--', marker = 'o', ms = 5, label = Players[1])
plt.plot(Salary[2], c='purple', ls = '--', marker = '^', ms = 8, label = Players[2]


plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

plt.show()
```

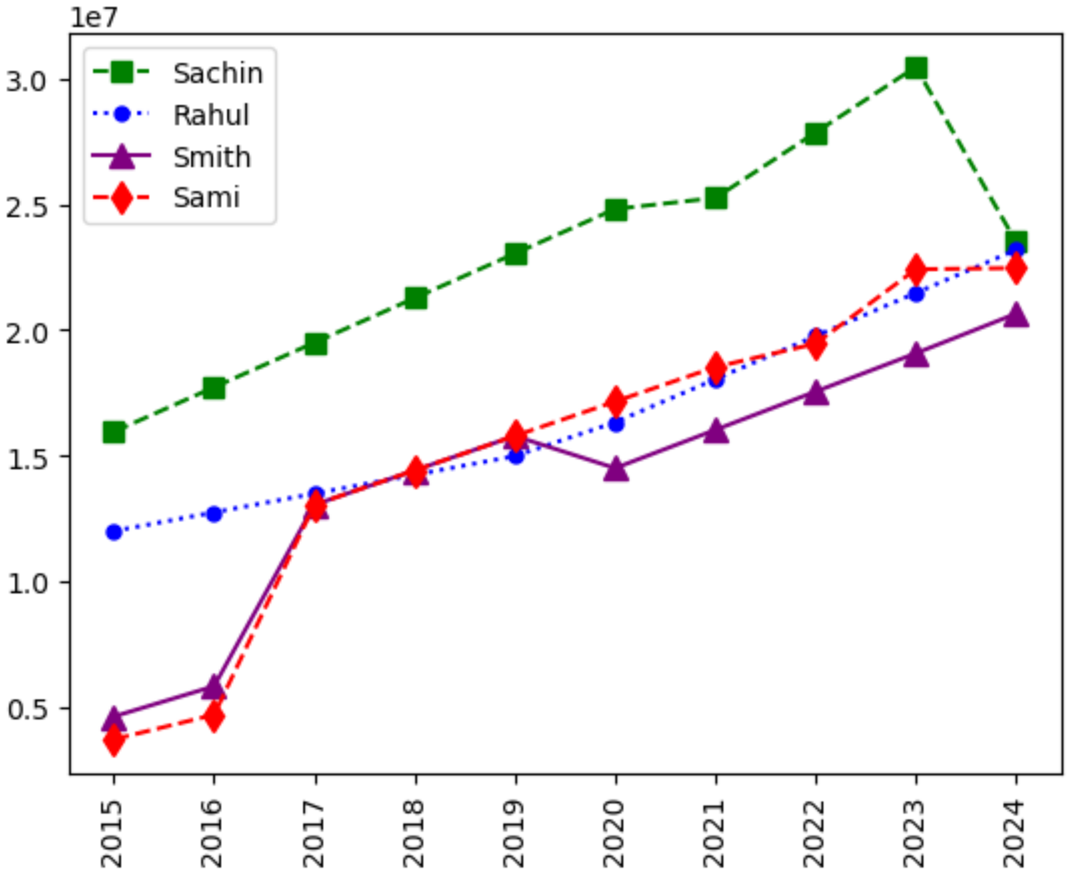


In [68]:

```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
plt.plot(Salary[1], c='Blue', ls = '-', marker = 'o', ms = 5, label = Players[1])
plt.plot(Salary[2], c='purple', ls = '--', marker = '^', ms = 8, label = Players[2]
plt.plot(Salary[3], c='Red', ls = ':', marker = 'd', ms = 8, label = Players[3])

plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

plt.show()
```

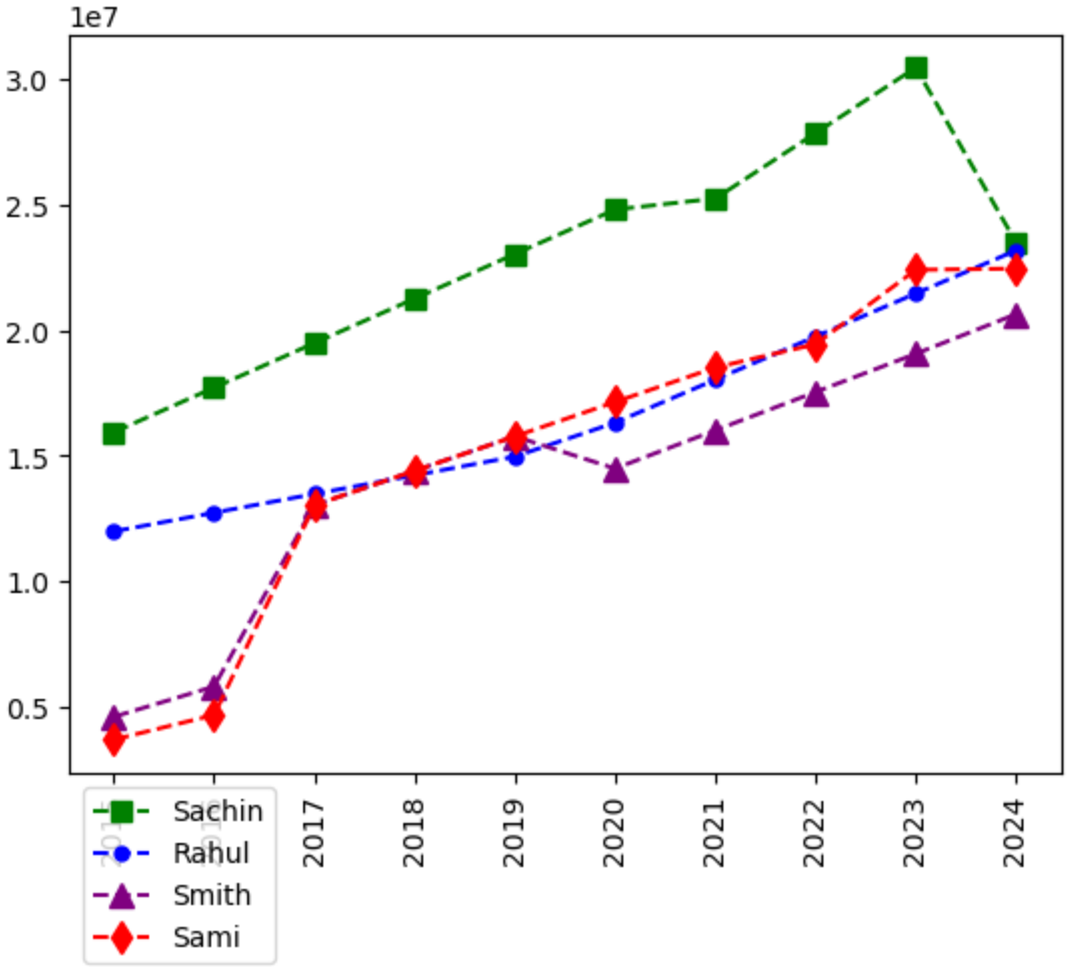


In [69]:
```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
plt.plot(Salary[1], c='Blue', ls = ':', marker = 'o', ms = 5, label = Players[1])
plt.plot(Salary[2], c='purple', ls = '-', marker = '^', ms = 8, label = Players[2])
plt.plot(Salary[3], c='Red', ls = '--', marker = 'd', ms = 8, label = Players[3])
plt.legend()
plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

plt.show()
```



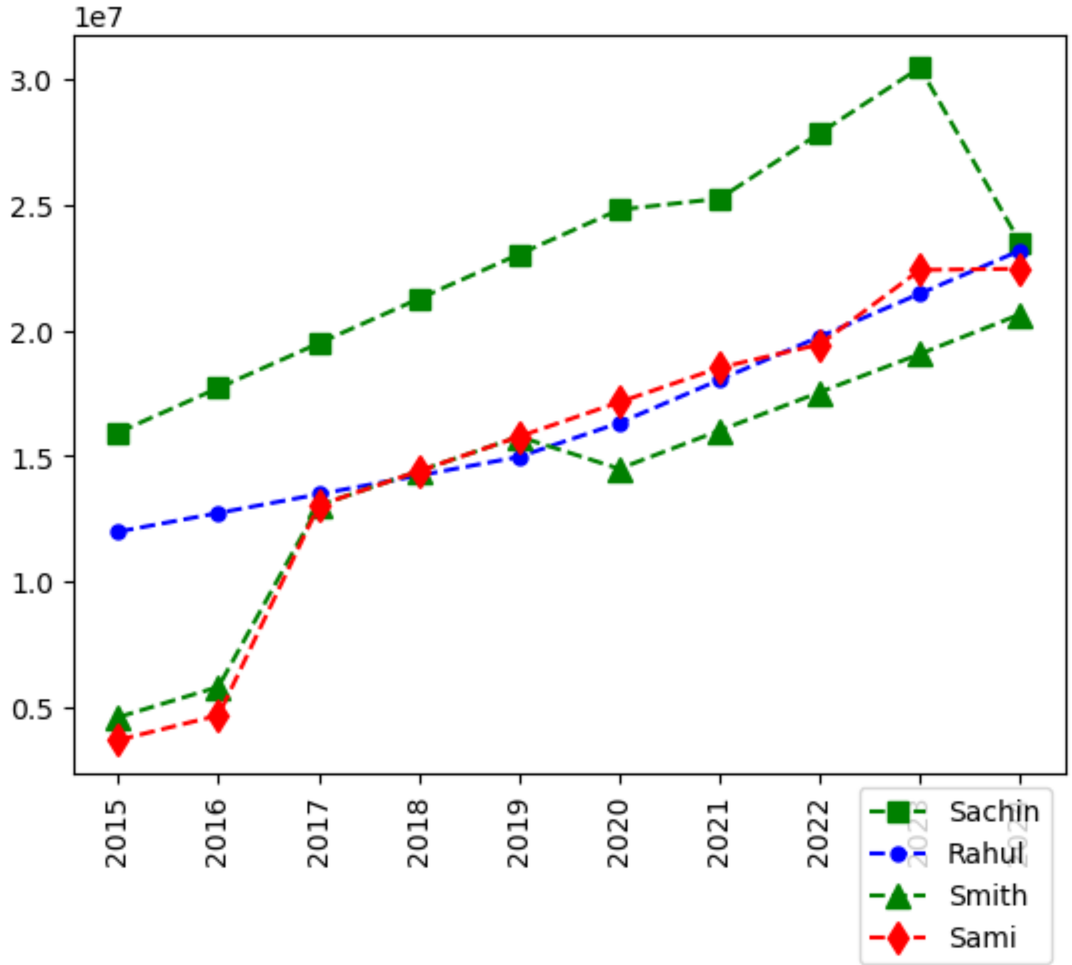
In [70]:

```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
plt.plot(Salary[1], c='Blue', ls = '--', marker = 'o', ms = 5, label = Players[1])
plt.plot(Salary[2], c='purple', ls = '--', marker = '^', ms = 8, label = Players[2]
plt.plot(Salary[3], c='Red', ls = '--', marker = 'd', ms = 8, label = Players[3])
plt.legend(loc = 'upper left',bbox_to_anchor=(0,0) )
plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

plt.show()
```

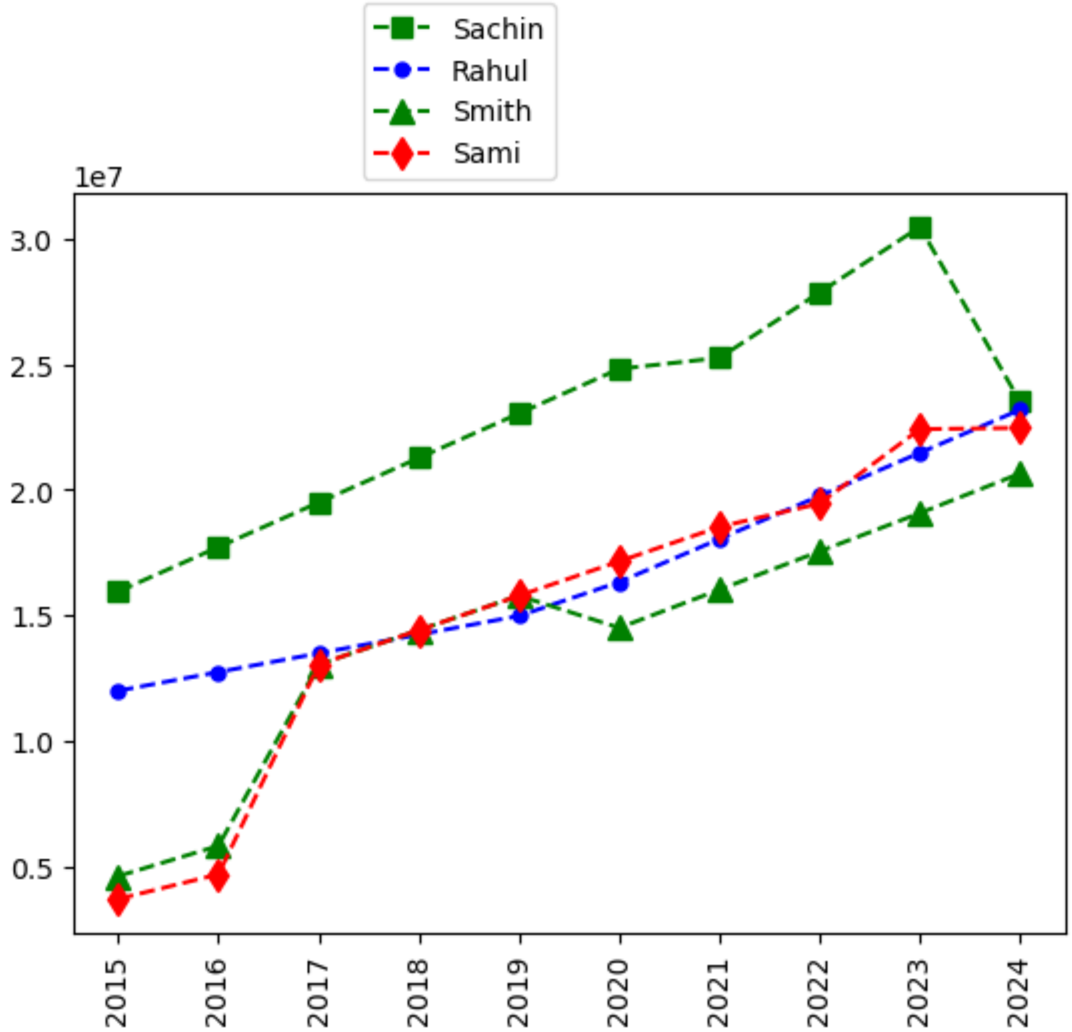


In [71]:

```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
plt.plot(Salary[1], c='Blue', ls = '--', marker = 'o', ms = 5, label = Players[1])
plt.plot(Salary[2], c='Green', ls = '--', marker = '^', ms = 8, label = Players[2])
plt.plot(Salary[3], c='Red', ls = '--', marker = 'd', ms = 8, label = Players[3])
plt.legend(loc = 'upper right',bbox_to_anchor=(1,0) )
plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

plt.show()
```

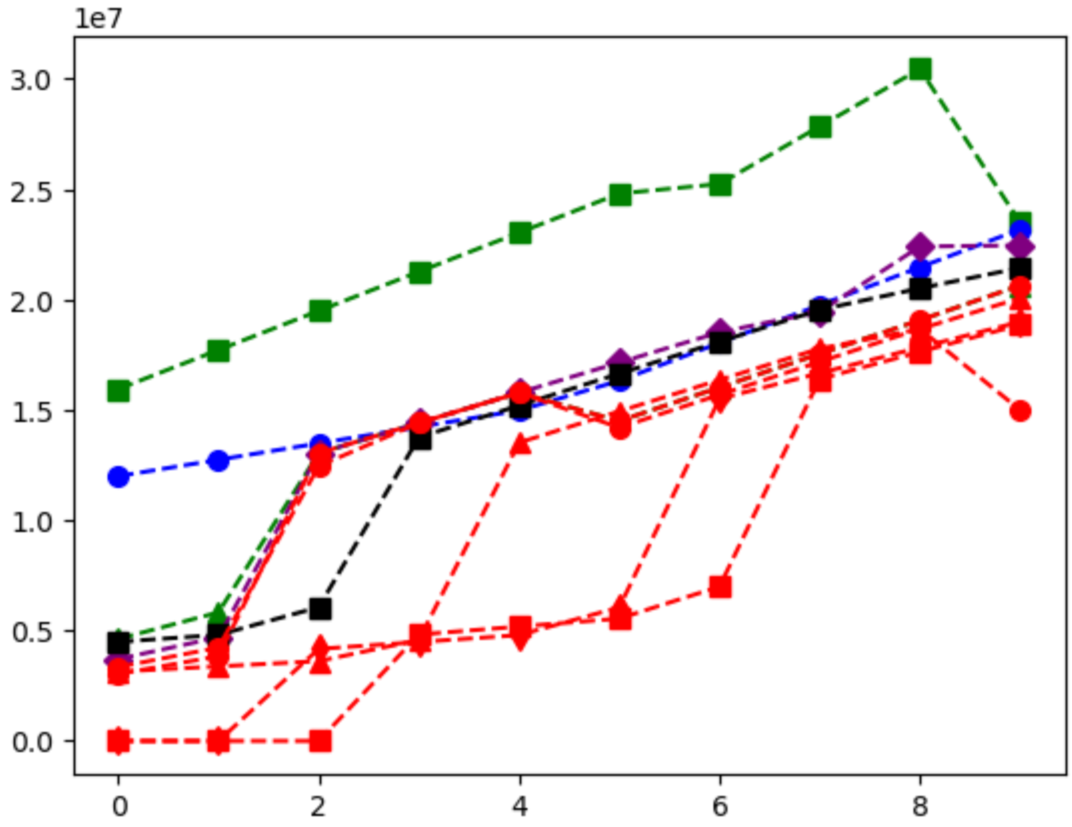


```
In [72]: plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
         plt.plot(Salary[1], c='Blue', ls = '--', marker = 'o', ms = 5, label = Players[1])
         plt.plot(Salary[2], c='Green', ls = '--', marker = '^', ms = 8, label = Players[2])
         plt.plot(Salary[3], c='Red', ls = '--', marker = 'd', ms = 8, label = Players[3])
         plt.legend(loc = 'lower right',bbox_to_anchor=(0.5,1) )
         plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

         plt.show()
```



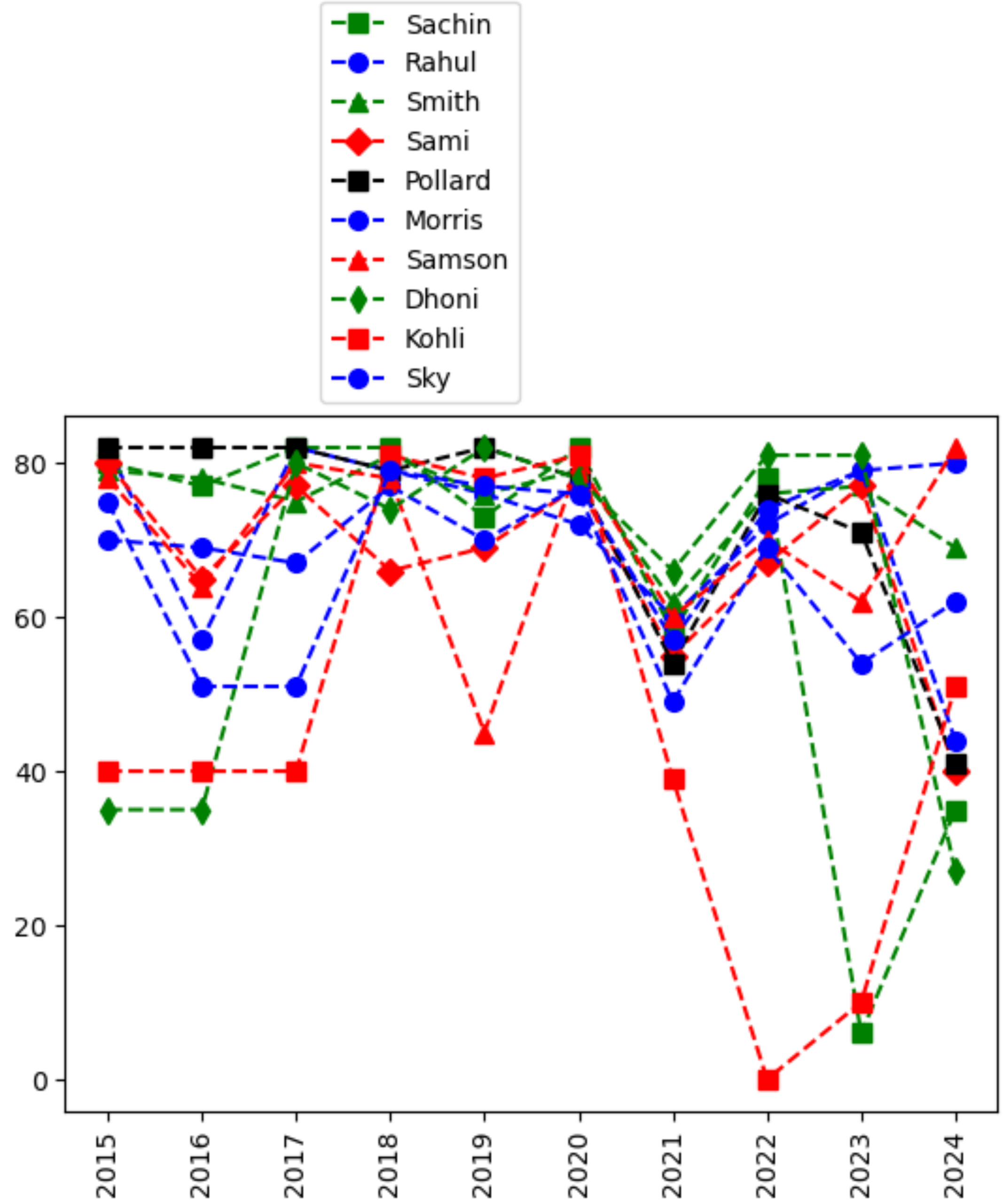
In [73]:
```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
plt.plot(Salary[1], c='Blue', ls = '--', marker = 'o', ms = 7, label = Players[1])
plt.plot(Salary[2], c='Green', ls = '--', marker = '^', ms = 7, label = Players[2])
plt.plot(Salary[3], c='Purple', ls = '--', marker = 'D', ms = 7, label = Players[3]
plt.plot(Salary[4], c='Black', ls = '--', marker = 's', ms = 7, label = Players[4])
plt.plot(Salary[5], c='Red', ls = '--', marker = 'o', ms = 7, label = Players[5])
plt.plot(Salary[6], c='Red', ls = '--', marker = '^', ms = 7, label = Players[6])
plt.plot(Salary[7], c='Red', ls = '--', marker = 'd', ms = 7, label = Players[7])
plt.plot(Salary[8], c='Red', ls = '--', marker = 's', ms = 7, label = Players[8])
plt.plot(Salary[9], c='Red', ls = '--', marker = 'o', ms = 7, label = Players[9])

plt.legend(loc = 'lover right',bbox_to_anchor=(0.5,1) )
plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

plt.show()
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
Cell In[73], line 12
      9 plt.plot(Salary[8], c='Red', ls = '--', marker = 's', ms = 7, label = Player
s[8])
     10 plt.plot(Salary[9], c='Red', ls = '--', marker = 'o', ms = 7, label = Player
s[9])
---> 12 plt.legend(loc = 'lover right',bbox_to_anchor=(0.5,1) )
     13 plt.xticks(list(range(0,10)), Seasons,rotation='vertical')
     15 plt.show()

File D:\Anaconda\Lib\site-packages\matplotlib\pyplot.py:3619, in legend(*args, **kwa
rgs)
   3617 @_copy_docstring_and_deprecators(Axes.legend)
   3618 def legend(*args, **kwargs) -> Legend:
-> 3619     return gca().legend(*args, **kwargs)

File D:\Anaconda\Lib\site-packages\matplotlib\axes\_axes.py:337, in Axes.legend(sel
f, *args, **kwargs)
    220 """
    221 Place a legend on the Axes.
    222 
   (...)
    334 .. plot:: gallery/text_labels_and_annotations/legend.py
    335 """
    336 handles, labels, kwargs = mlegend._parse_legend_args([self], *args, **kwarg
s)
--> 337 self.legend_ = mlegend.Legend(self, handles, labels, **kwargs)
    338 self.legend_._remove_method = self._remove_legend
    339 return self.legend_

File D:\Anaconda\Lib\site-packages\matplotlib\legend.py:552, in Legend.__init__(sel
f, parent, handles, labels, loc, numpoints, markerscale, markerfirst, reverse, scatt
erpoints, scatteryoffsets, prop, fontsize, labelcolor, borderpad, labelspacing, hand
lelength, handleheight, handletextpad, borderaxespad, columnspacing, ncols, mode, fa
ncybox, shadow, title, title_fontsize, framealpha, edgecolor, facecolor, bbox_to_anc
hor, bbox_transform, frameon, handler_map, title_fontproperties, alignment, ncol, dr
aggable)
    549 self._init_legend_box(handles, labels, markerfirst)
    551 # Set legend location
--> 552 self.set_loc(loc)
    554 # figure out title font properties:
    555 if title_fontsize is not None and title_fontproperties is not None:

File D:\Anaconda\Lib\site-packages\matplotlib\legend.py:670, in Legend.set_loc(self,
loc)
    668             loc = locs[0] + ' ' + locs[1]
    669     # check that loc is in acceptable strings
--> 670     loc = _api.check_getitem(self.codes, loc=loc)
    671 elif np.iterable(loc):
    672     # coerce iterable into tuple
    673     loc = tuple(loc)

File D:\Anaconda\Lib\site-packages\matplotlib\_api\__init__.py:184, in check_getitem
(mapping, **kwargs)
    182     return mapping[v]
    183 except KeyError:
--> 184     raise ValueError(
    185         f"{v!r} is not a valid value for {k}; supported values are "
    186         f"{', '.join(map(repr, mapping))}") from None

ValueError: 'lover right' is not a valid value for loc; supported values are 'best',
'upper right', 'upper left', 'lower left', 'lower right', 'right', 'center left', 'c
enter right', 'lower center', 'upper center', 'center'
```



In [74]:

```
plt.plot(Games[0], c='Green', ls = '--', marker = 's', ms = 7, label = Players[0])
plt.plot(Games[1], c='Blue', ls = '--', marker = 'o', ms = 7, label = Players[1])
plt.plot(Games[2], c='Green', ls = '--', marker = '^', ms = 7, label = Players[2])
plt.plot(Games[3], c='Red', ls = '--', marker = 'D', ms = 7, label = Players[3])
plt.plot(Games[4], c='Black', ls = '--', marker = 's', ms = 7, label = Players[4])
plt.plot(Games[5], c='Blue', ls = '--', marker = 'o', ms = 7, label = Players[5])
plt.plot(Games[6], c='red', ls = '--', marker = '^', ms = 7, label = Players[6])
plt.plot(Games[7], c='Green', ls = '--', marker = 'd', ms = 7, label = Players[7])
plt.plot(Games[8], c='Red', ls = '--', marker = 's', ms = 7, label = Players[8])
plt.plot(Games[9], c='Blue', ls = '--', marker = 'o', ms = 7, label = Players[9])

plt.legend(loc = 'lower right',bbox_to_anchor=(0.5,1) )
plt.xticks(list(range(0,10)), Seasons,rotation='vertical')

plt.show()
```


Sachin
Rahul
Smith
Sami
Pollard
Morris
Samson
Dhoni
Kohli
Sky
0
20
40
60
80
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024

```
In [ ]:
```