In [ ]:
```
import numpy as np
```

In [ ]:
```
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

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

#Salaries
Sachin_Salary = [15946875,17718750,19490625,21262500,23034375,24806250,25244493,
Rahul_Salary = [12000000,12744189,13488377,14232567,14976754,16324500,18038573,1
Smith_Salary = [4621800,5828090,13041250,14410581,15779912,14500000,16022500,175
Sami_Salary = [3713640,4694041,13041250,14410581,15779912,17149243,18518574,1945
Pollard_Salary = [4493160,4806720,6061274,13758000,15202590,16647180,18091770,19
Morris_Salary = [3348000,4235220,12455000,14410581,15779912,14500000,16022500,17
Samson_Salary = [3144240,3380160,3615960,4574189,13520500,14940153,16359805,1777
Dhoni_Salary = [0,0,4171200,4484040,4796880,6053663,15506632,16669630,17832627,1
Kohli_Salary = [0,0,0,4822800,5184480,5546160,6993708,16402500,17632688,18862875
Sky_Salary = [3031920,3841443,13041250,14410581,15779912,14200000,15691000,17182
#Matrix
Salary = np.array([Sachin_Salary, Rahul_Salary, Smith_Salary, Sami_Salary, Polla

#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, Samsc

#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, Morr
```

In [101…
```
Salary[2]
```

Out[101… array([4621800, 5828090, 13041250, 14410581, 15779912, 14500000, 16022500, 17545000, 19067500, 20644400])

In [ ]:
```
Games
```

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

In [ ]:
```
Games[0:5]
```

In [ ]:
```
Games[0,5]
```

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

In [ ]:
```
Points
```

In [ ]:
```
Points[0]
```

In [ ]:
```
Points[0:5]
```

In [ ]:
```
Points[-6,-1]
```

In [ ]:
```
Pdict
```

In [ ]:
```
Pdict['Rahul']
```

In [ ]:
```
Pdict['Sachin']
```

In [ ]:
```
Games[1]
```

In [ ]:
```
Games[Pdict['Rahul']]
```

In [ ]:
```
Games
```

In [ ]:
```
Games[1]
```

In [ ]:
```
import warnings
warnings.filterwarnings('ignore')
```

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

In [ ]:
```
Salary
```

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

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

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

In [ ]:
```
plt.plot(Salary[0], color='green', ls = '--')
plt.show()
```

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

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

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

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

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

In [ ]:
```
%matplotlib inline
plt.rcParams['figure.figsize']=7,8
```

In [ ]:
```
plt.plot(Salary[0],c='b',ls='--',marker= 's', ms = 5)
```

In [ ]:
```
plt.show()
```

In [ ]:
```
%matplotlib inline
plt.rcParams['figure.figsize']=17,5
```

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

In [ ]:
```

```

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

In [ ]:
```
plt.plot(Salary[0], c = 'Blue', ls= '--', marker = 'D')
plt.show()
```

In [ ]:
```
plt.plot(Salary[0], c = 'Blue', ls= '--', marker = '^')
plt.show()
```

In [ ]:
```
plt.plot(Salary[0], c = 'Blue', ls= '--', marker = '4')
plt.show()
```

In [ ]:
```

```

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

In [ ]:
```
plt.plot(Salary[0], c = 'Green', ls= '--', marker = 's', ms = 5)
plt.show()
```

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

In [ ]:
```
Sdict
```

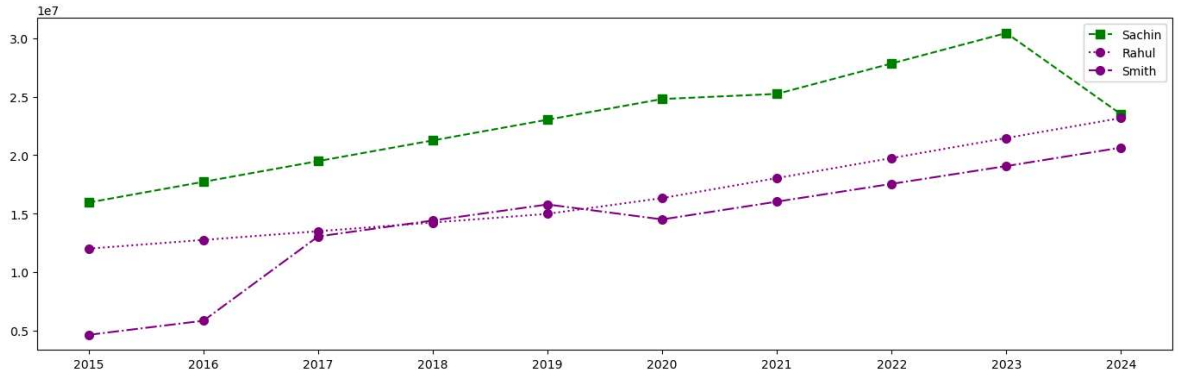
In [ ]:
```
Pdict
```

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

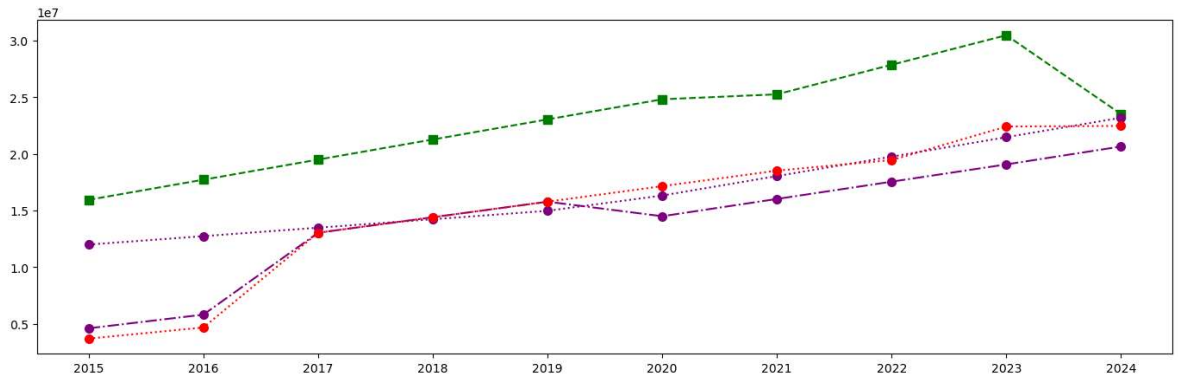
In [ ]:
```
plt.plot(Salary[0], c = 'blue', marker='s', ms = 7,label=Players[0])
plt.xticks(list(range(0,10)), Seasons, rotation='vertical')
plt.show()
```

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

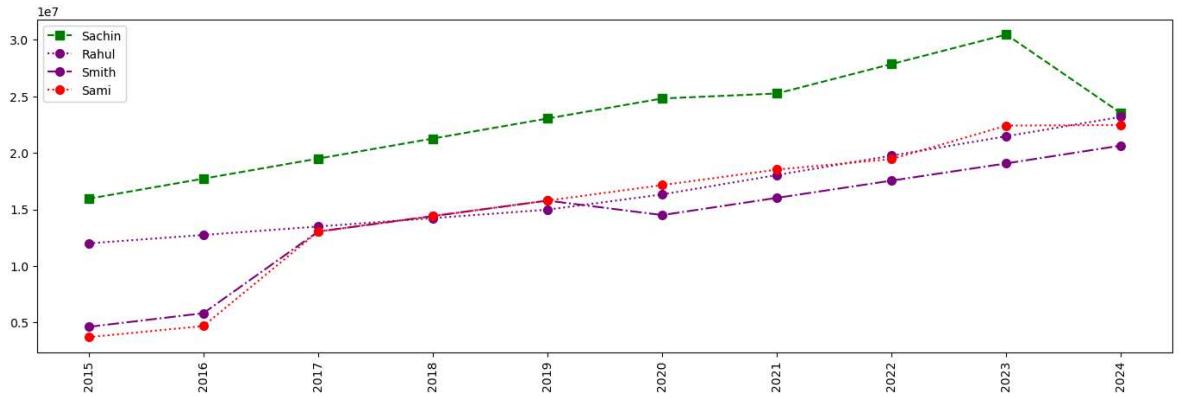
In [115…
```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])
#plt.plot(Salary[2], c = 'Blue', ld='-.', marker = '^', ms = 8, label = Players[
#plt.plot(Salary[2], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1]
plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2]

plt.legend()
plt.xticks(list(range(0,10)), Seasons, rotation='horizontal')
plt.show()
```



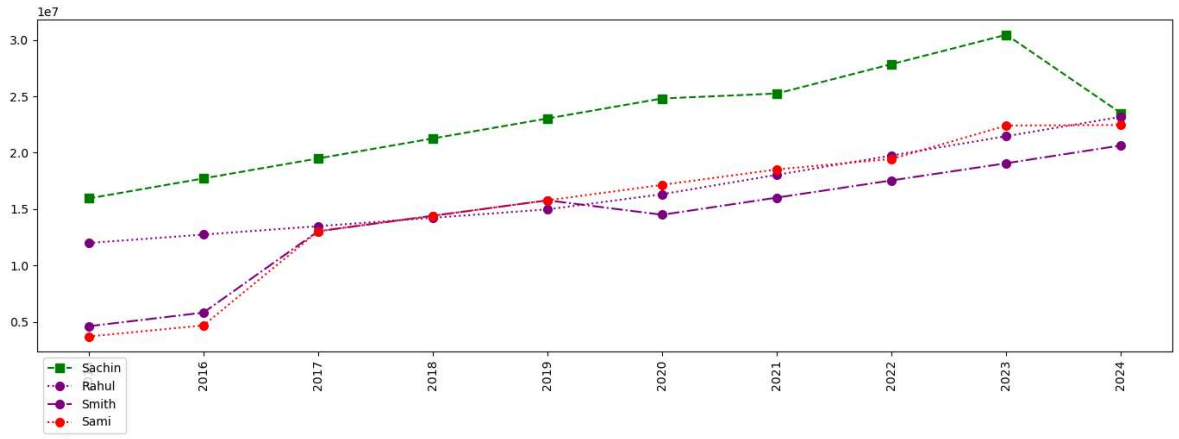
In [117…
```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])
#plt.plot(Salary[2], c = 'Blue', ld='-.', marker = '^', ms = 8, label = Players[
#plt.plot(Salary[2], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1]
plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2]
plt.plot(Salary[3], c = 'Red', ls = ':', marker='o', ms = 7,label=Players[3])


#plt.legend()
plt.xticks(list(range(0,10)), Seasons, rotation='horizontal')
plt.show()
```



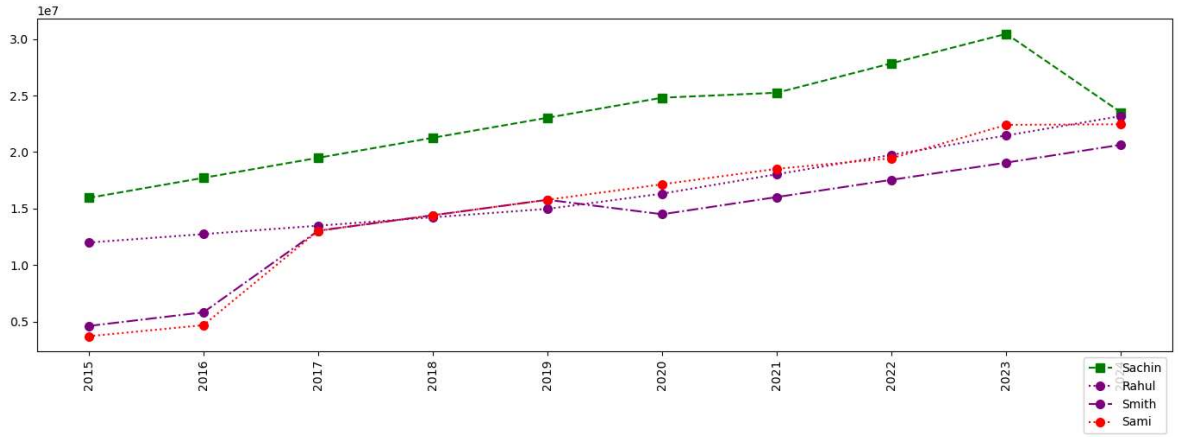
In [123…
```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])

plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2])
plt.plot(Salary[3], c = 'Red', ls = ':', marker='o', ms = 7,label=Players[3])


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



In [125…
```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])

plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2])
plt.plot(Salary[3], c = 'Red', ls = ':', marker='o', ms = 7,label=Players[3])


plt.legend(loc = 'upper left', bbox_to_anchor = (0,0))
plt.xticks(list(range(0,10)), Seasons, rotation='vertical')
plt.show()
```

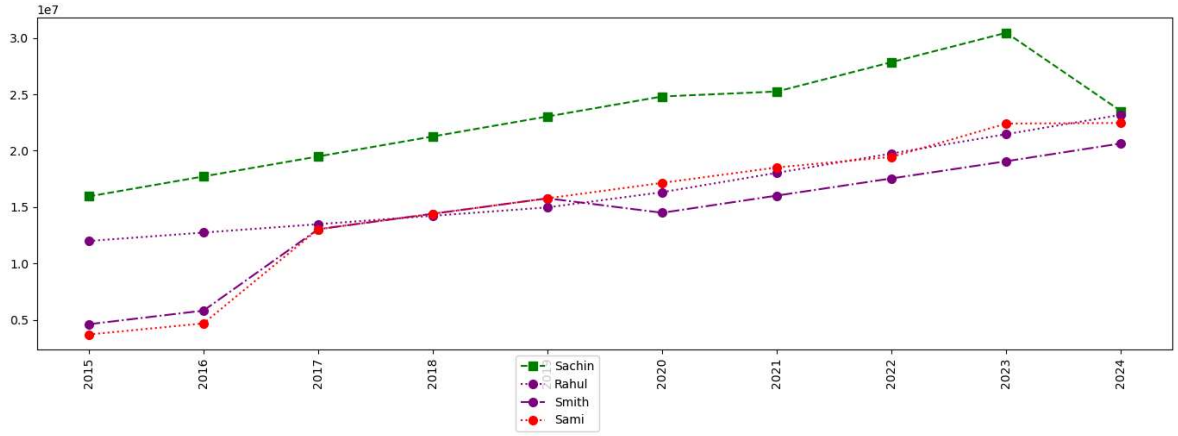


In [148…
```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])

plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2])
plt.plot(Salary[3], c = 'Red', ls = ':', marker='o', ms = 7,label=Players[3])


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



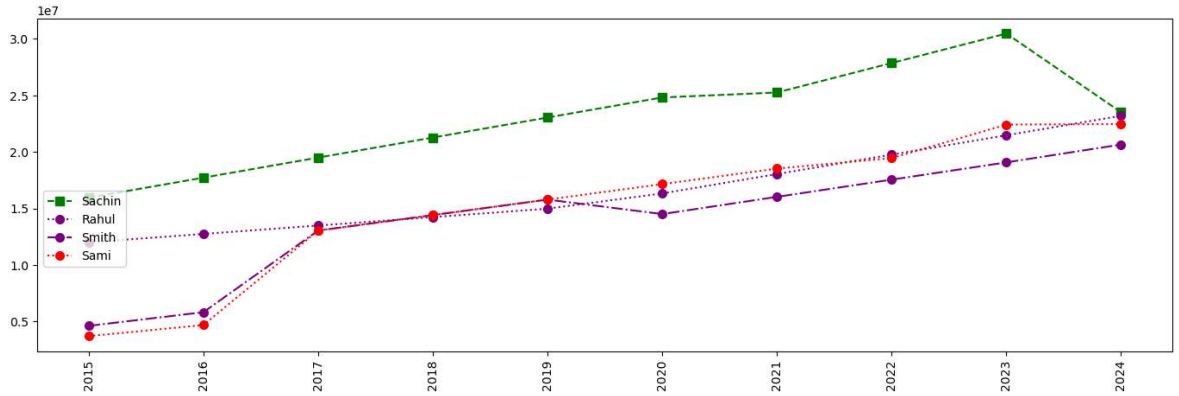
In [150…

```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])

plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2]
plt.plot(Salary[3], c = 'Red', ls = ':', marker='o', ms = 7,label=Players[3])


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



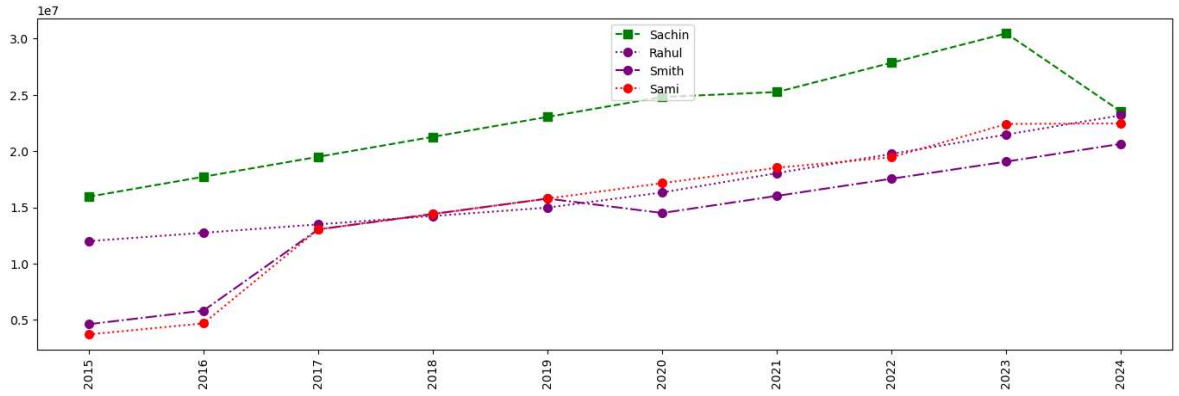
In [146…

```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])

plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2]
plt.plot(Salary[3], c = 'Red', ls = ':', marker='o', ms = 7,label=Players[3])


plt.legend(loc = 'upper left', bbox_to_anchor = (0,0.5))
plt.xticks(list(range(0,10)), Seasons, rotation='vertical')
plt.show()
```



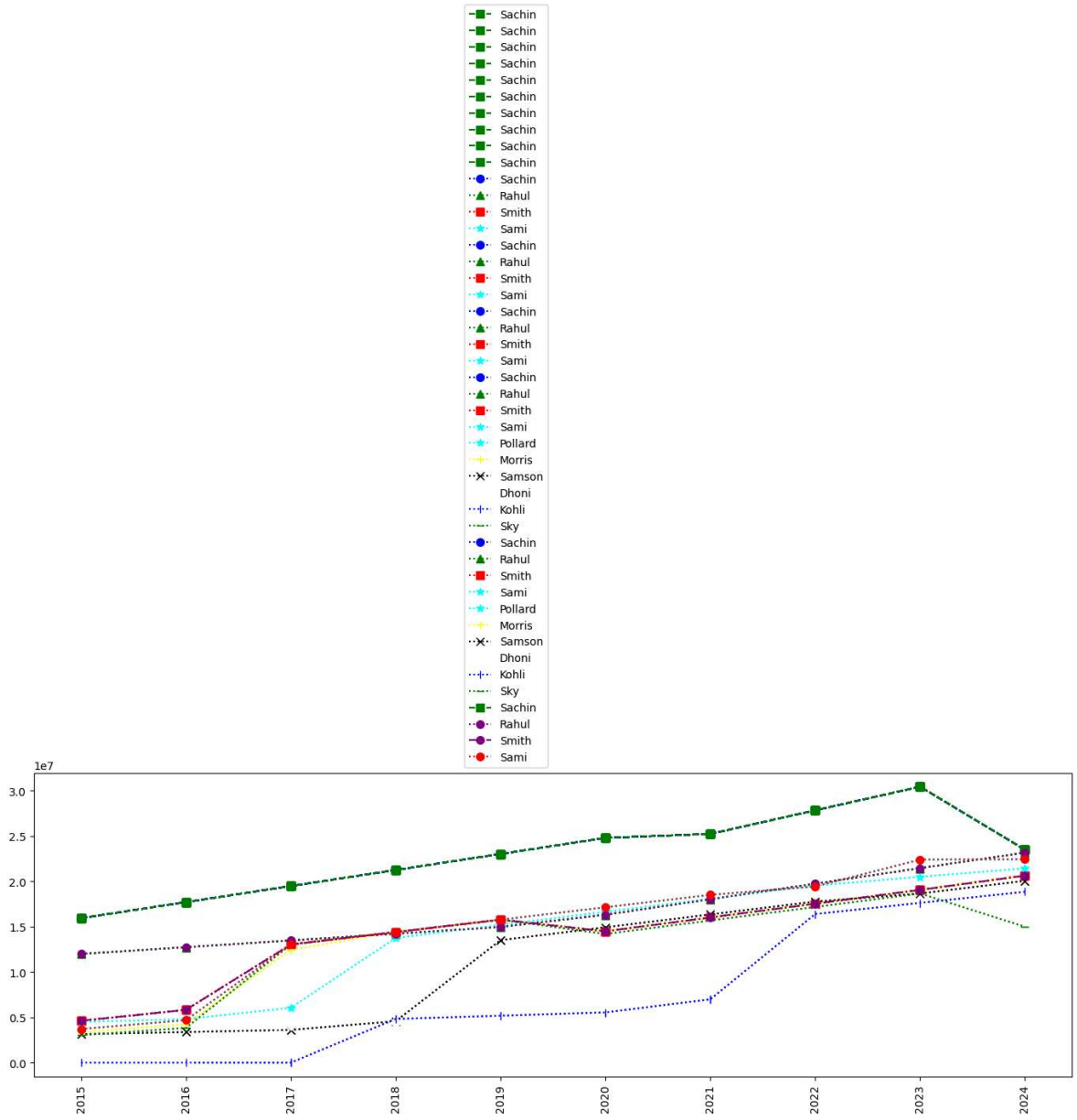
In [144…

```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])

plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2]
plt.plot(Salary[3], c = 'Red', ls = ':', marker='o', ms = 7,label=Players[3])


plt.legend(loc = 'upper left', bbox_to_anchor = (0.5,1) )
plt.xticks(list(range(0,10)), Seasons, rotation='vertical')
plt.show()
```



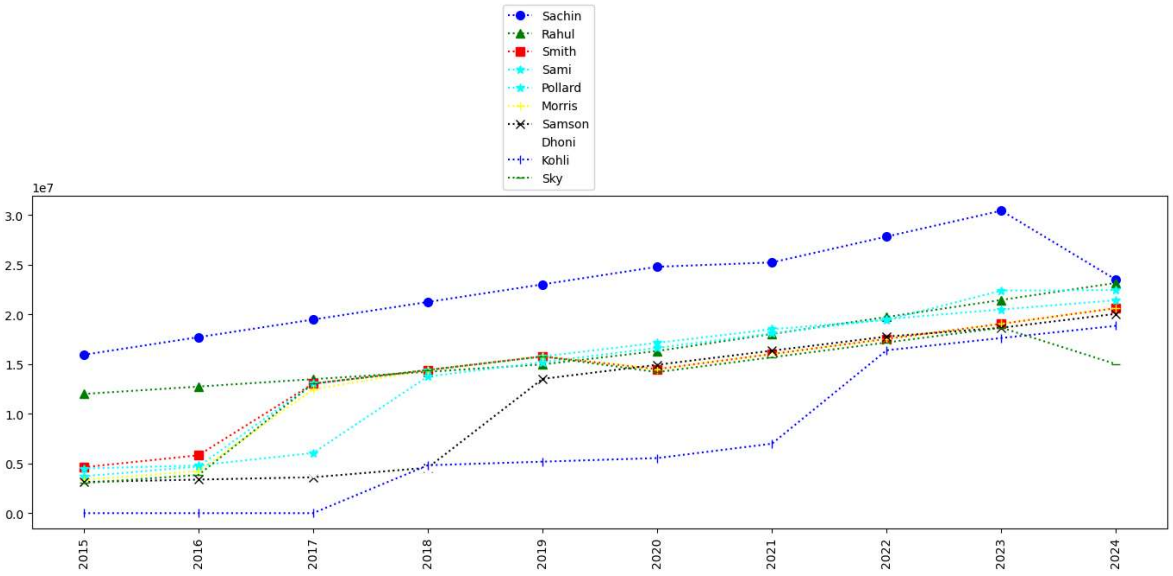
In [171…

```
plt.plot(Salary[0], c = 'Green', ls='--', marker='s', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'Purple', ls = ':', marker='o', ms = 7,label=Players[1])

plt.plot(Salary[2], c = 'Purple', ls = '-.', marker='o', ms = 7,label=Players[2]
plt.plot(Salary[3], c = 'Red', ls = ':', marker='o', ms = 7,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()
```



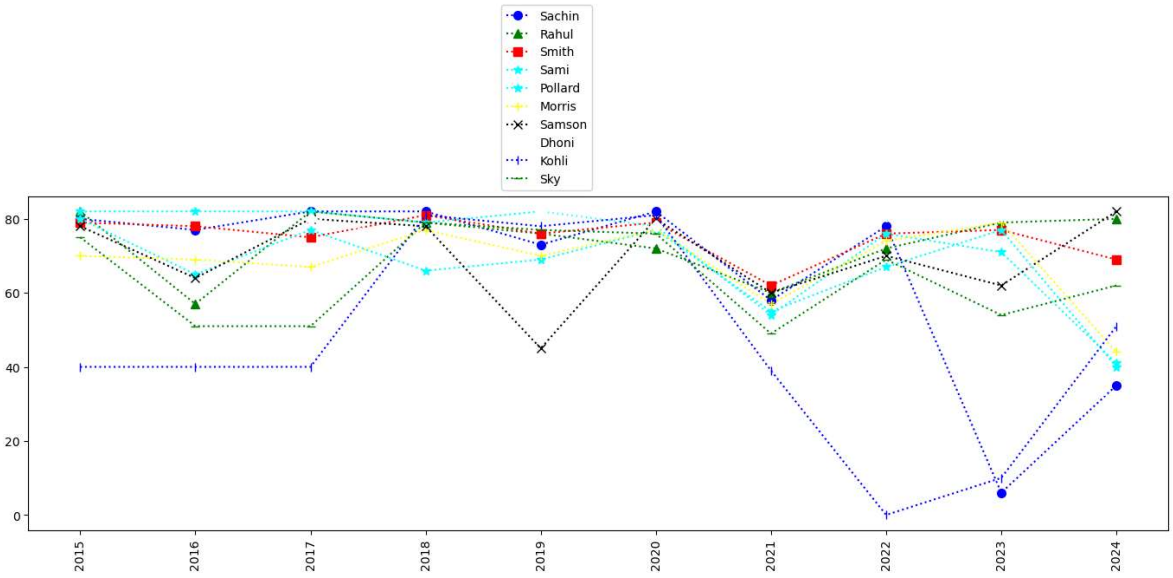
In [184…

```
plt.plot(Salary[0], c = 'blue', ls=':', marker='o', ms = 7,label=Players[0])
plt.plot(Salary[1], c = 'green', ls=':', marker='^', ms = 7,label=Players[1])
plt.plot(Salary[2], c = 'red', ls=':', marker='s', ms = 7,label=Players[2])
plt.plot(Salary[3], c = 'cyan', ls=':', marker='*', ms = 7,label=Players[3])
plt.plot(Salary[4], c = 'cyan', ls=':', marker='*', ms = 7,label=Players[4])
#plt.plot(Salary[4], c = 'magneta', ls=':', marker='h', ms = 7,label=Players[4])
plt.plot(Salary[5], c = 'yellow', ls=':', marker='+', ms = 7,label=Players[5])
plt.plot(Salary[6], c = 'black', ls=':', marker='x', ms = 7,label=Players[6])
plt.plot(Salary[7], c = 'white', ls=':', marker='D', ms = 7,label=Players[7])
plt.plot(Salary[8], c = 'blue', ls=':', marker='|', ms = 7,label=Players[8])
plt.plot(Salary[9], c = 'Green', ls=':', marker='_', 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.xticks(list(range(0,10)), Seasons, rotation='vertical')
plt.show()
```



In [186…

```
plt.plot(Games[0], c = 'blue', ls=':', marker='o', ms = 7,label=Players[0])
plt.plot(Games[1], c = 'green', ls=':', marker='^', ms = 7,label=Players[1])
plt.plot(Games[2], c = 'red', ls=':', marker='s', ms = 7,label=Players[2])
plt.plot(Games[3], c = 'cyan', ls=':', marker='*', ms = 7,label=Players[3])
plt.plot(Games[4], c = 'cyan', ls=':', marker='*', ms = 7,label=Players[4])
#plt.plot(Games[4], c = 'magneta', ls=':', marker='h', ms = 7,label=Players[4])
plt.plot(Games[5], c = 'yellow', ls=':', marker='+', ms = 7,label=Players[5])
plt.plot(Games[6], c = 'black', ls=':', marker='x', ms = 7,label=Players[6])
plt.plot(Games[7], c = 'white', ls=':', marker='D', ms = 7,label=Players[7])
plt.plot(Games[8], c = 'blue', ls=':', marker='|', ms = 7,label=Players[8])
plt.plot(Games[9], c = 'Green', ls=':', marker='_', 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.xticks(list(range(0,10)), Seasons, rotation='vertical')
plt.show()
```



In [ ]:

In [ ]:

In [ ]: