

```

In [4]: #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

#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, Samso

#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 [6]: Salary

```

```
Out[6]: 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 [8]: Games

```
Out[8]: 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 [10]: Points

```
Out[10]: 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 [12]: Games

```
Out[12]: 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 [14]: Games[5]

Out[14]: array([70, 69, 67, 77, 70, 77, 57, 74, 79, 44])

In [16]: Games[0:5]

Out[16]: 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]])

In [18]: Games

Out[18]: 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 [20]: Games[0,5]

Out[20]: 82

In [22]: Games[2]

Out[22]: array([79, 78, 75, 81, 76, 79, 62, 76, 77, 69])

In [24]: Games[2,8]

Out[24]: 77

In [26]: Games[-3:-1]

Out[26]: array([[35, 35, 80, 74, 82, 78, 66, 81, 81, 27],
[40, 40, 40, 81, 78, 81, 39, 0, 10, 51]])

In [28]: Games[-3,-1]

Out[28]: 27

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 [32]: Points[0]
```

```
Out[32]: array([2832, 2430, 2323, 2201, 1970, 2078, 1616, 2133, 83, 782])
```

```
In [34]: Points[:]
```

```
Out[34]: 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 [36]: Points[6,1]
```

```
Out[36]: 1104
```

```
In [38]: Points[3:6]
```

```
Out[38]: array([[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]])
```

```
In [40]: Points[-6,-1]
```

```
Out[40]: 646
```

```
In [42]: Games
```

```
Out[42]: 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 [44]: Pdict
```

```
Out[44]: {'Sachin': 0,
          'Rahul': 1,
          'Smith': 2,
          'Sami': 3,
          'Pollard': 4,
          'Morris': 5,
          'Samson': 6,
          'Dhoni': 7,
          'Kohli': 8,
          'Sky': 9}
```

```
In [46]: Pdict['Sachin']
```

```
Out[46]: 0
```

```
In [48]: Games[Pdict['Sachin']]
```

```
Out[48]: array([80, 77, 82, 82, 73, 82, 58, 78, 6, 35])
```

```
In [50]: Pdict['Rahul']
```

```
Out[50]: 1
```

```
In [52]: Games[1]
```

```
Out[52]: array([82, 57, 82, 79, 76, 72, 60, 72, 79, 80])
```

```
In [54]: Games[Pdict['Rahul']]
```

```
Out[54]: array([82, 57, 82, 79, 76, 72, 60, 72, 79, 80])
```

Games

```
In [57]: Points
```

```
Out[57]: 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 [59]: Salary
```

```
Out[59]: 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 [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 [63]: Salary/Games

C:\Users\ruchi\AppData\Local\Temp\ipykernel_14056\3709746658.py:1: RuntimeWarning: divide by zero encountered in divide
Salary/Games

```
Out[63]: array([[ 199335.9375, 230113.63636364, 237690.54878049,
                  259298.7804878, 315539.38356164, 302515.24390244,
                  435249.87931034, 357040.37179487, 5075634.16666667,
                  671428.57142857],
                [ 146341.46341463, 223582.26315789, 164492.40243902,
                  180159.07594937, 197062.55263158, 226729.16666667,
                  300642.88333333, 274342.29166667, 271730.60759494,
                  289759.875],
                [ 58503.79746835, 74719.1025641, 173883.33333333,
                  177908.40740741, 207630.42105263, 183544.30379747,
                  258427.41935484, 230855.26315789, 247629.87012987,
                  299194.20289855],
                [ 46420.5, 72216.01538462, 169366.88311688,
                  218342.13636364, 228694.37681159, 222717.44155844,
                  336701.34545455, 290298.50746269, 291006.15584416,
                  561450.],
                [ 54794.63414634, 58618.53658537, 73917.97560976,
                  174151.89873418, 185397.43902439, 213425.38461538,
                  335032.77777778, 257057.36842105, 288918.,
                  522835.87804878],
                [ 47828.57142857, 61380., 185895.52238806,
                  187150.4025974, 225427.31428571, 188311.68831169,
                  281096.49122807, 237094.59459459, 241360.75949367,
                  469190.90909091],
                [ 40310.76923077, 52815., 45199.5,
                  58643.44871795, 300455.55555556, 186751.9125,
                  272663.41666667, 253992.25714286, 301103.72580645,
                  244738.57317073],
                [ 0., 0., 52140.,
                  60595.13513514, 58498.53658537, 77611.06410256,
                  234948.96969697, 205797.90123457, 220155.88888889,
                  703541.62962963],
                [ 0., 0., 0.,
                  59540.74074074, 66467.69230769, 68471.11111111,
                  179325.84615385, inf, 1763268.8,
                  369860.29411765],
                [ 40425.6, 75322.41176471, 255710.78431373,
                  182412.41772152, 204933.92207792, 186842.10526316,
                  320224.48979592, 249014.49275362, 345796.2962963,
                  241935.48387097]])
```

In [65]: `np.round(Salary/Games)`

C:\Users\ruchi\AppData\Local\Temp\ipykernel_14056\3232172828.py:1: RuntimeWarning: divide by zero encountered in divide
 np.round(Salary/Games)

Out[65]: array([[199336., 230114., 237691., 259299., 315539., 302515.,
 435250., 357040., 5075634., 671429.],
 [146341., 223582., 164492., 180159., 197063., 226729.,
 300643., 274342., 271731., 289760.],
 [58504., 74719., 173883., 177908., 207630., 183544.,
 258427., 230855., 247630., 299194.],
 [46420., 72216., 169367., 218342., 228694., 222717.,
 336701., 290299., 291006., 561450.],
 [54795., 58619., 73918., 174152., 185397., 213425.,
 335033., 257057., 288918., 522836.],
 [47829., 61380., 185896., 187150., 225427., 188312.,
 281096., 237095., 241361., 469191.],
 [40311., 52815., 45200., 58643., 300456., 186752.,
 272663., 253992., 301104., 244739.],
 [0., 0., 52140., 60595., 58499., 77611.,
 234949., 205798., 220156., 703542.],
 [0., 0., 0., 59541., 66468., 68471.,
 179326., inf, 1763269., 369860.],
 [40426., 75322., 255711., 182412., 204934., 186842.,
 320224., 249014., 345796., 241935.]])

In [67]: `import warnings`
`warnings.filterwarnings('ignore')`

In [69]: `import matplotlib.pyplot as plt`

In [70]: `%matplotlib inline`

In [71]: `Salary`

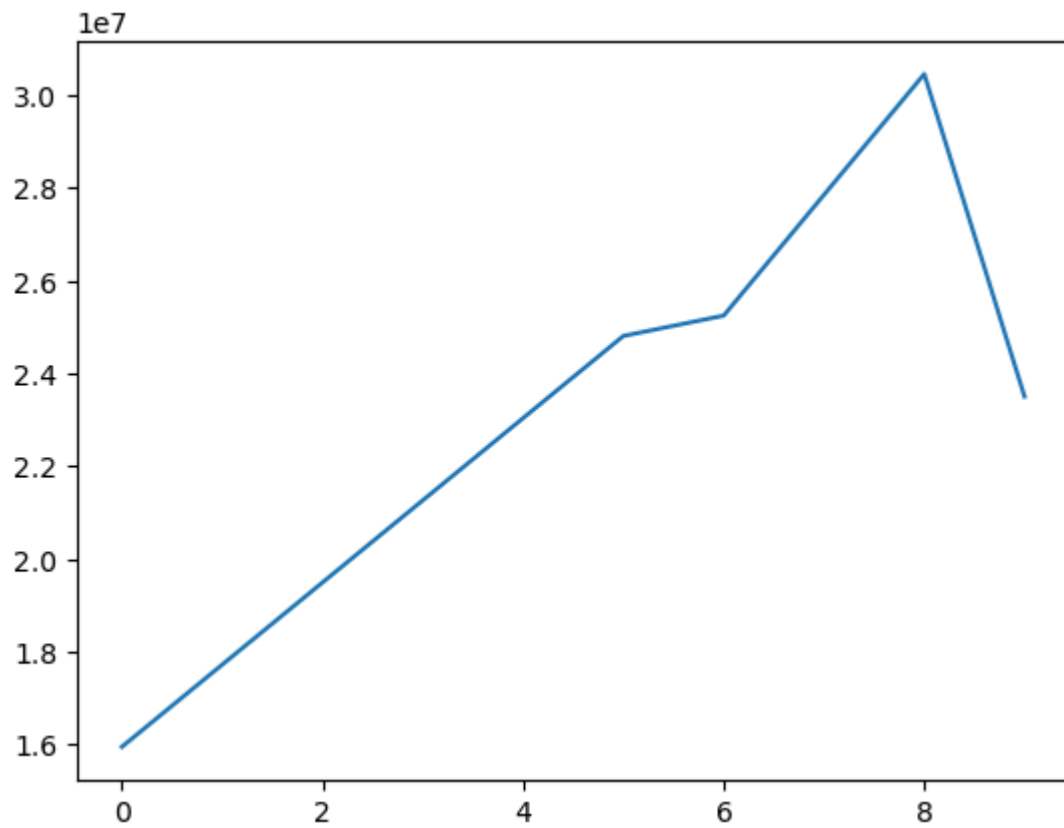
Out[71]: array([[15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
 25244493, 27849149, 30453805, 23500000],
 [12000000, 12744189, 13488377, 14232567, 14976754, 16324500,
 18038573, 19752645, 21466718, 23180790],
 [4621800, 5828090, 13041250, 14410581, 15779912, 14500000,
 16022500, 17545000, 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 [72]: `Salary[0]`

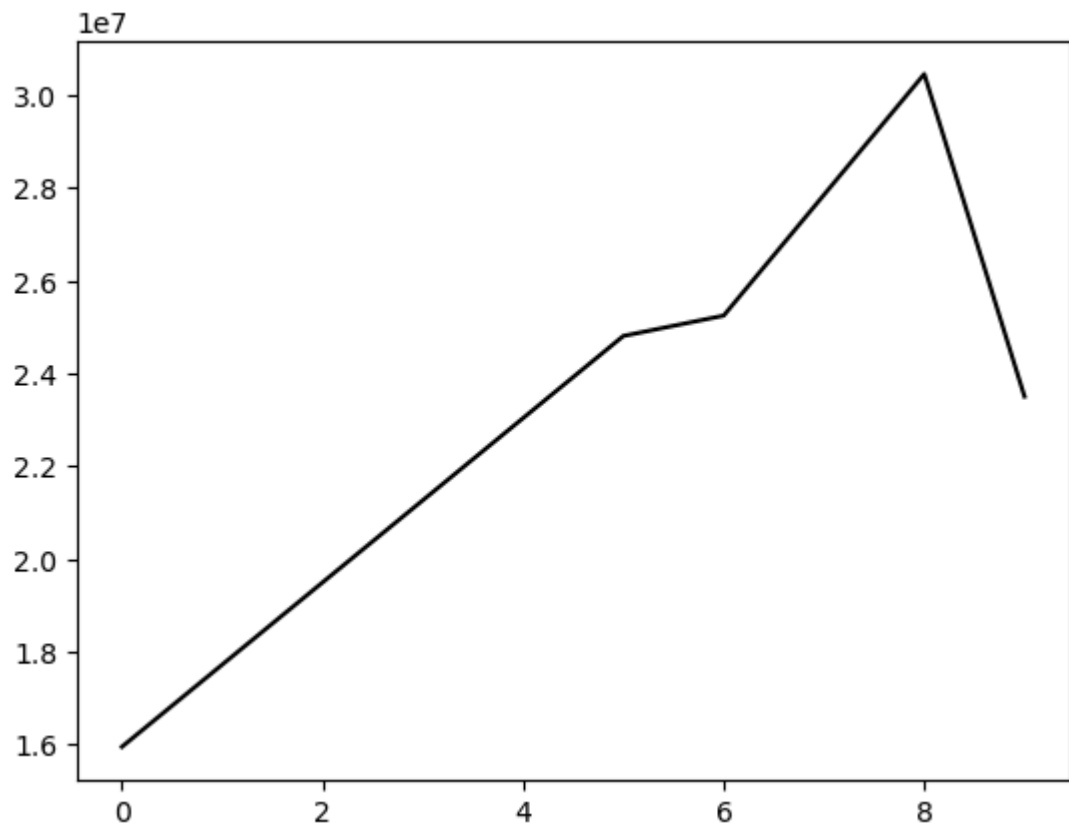
```
Out[72]: array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,  
                25244493, 27849149, 30453805, 23500000])
```

```
In [77]: %matplotlib inline  
import matplotlib.pyplot as plt
```

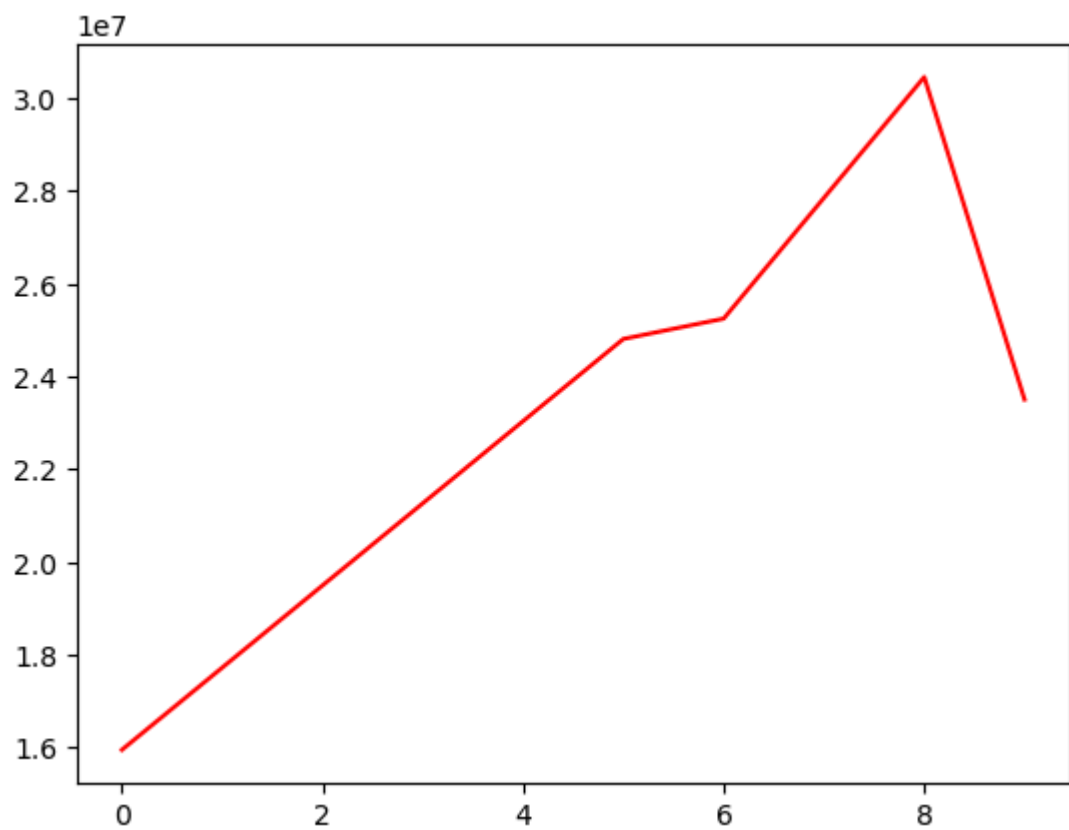
```
In [79]: plt.plot(Salary[0])  
plt.show()
```



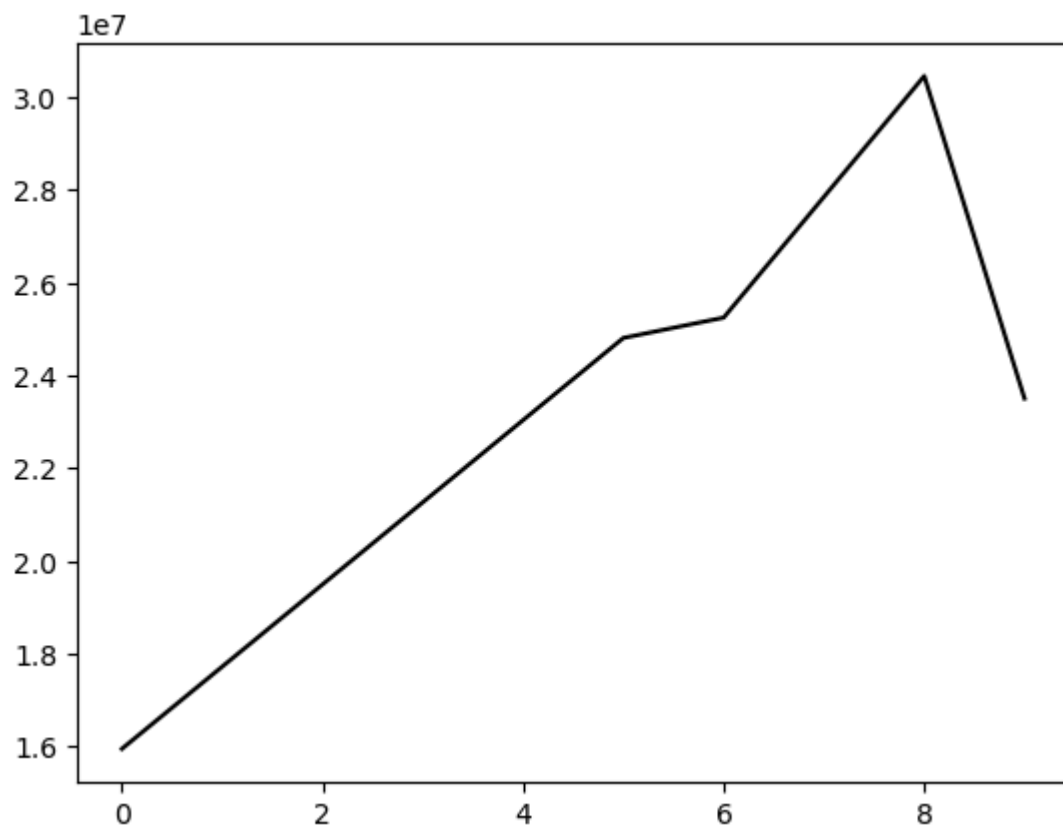
```
In [81]: plt.plot(Salary[0], color='black')  
plt.show()
```

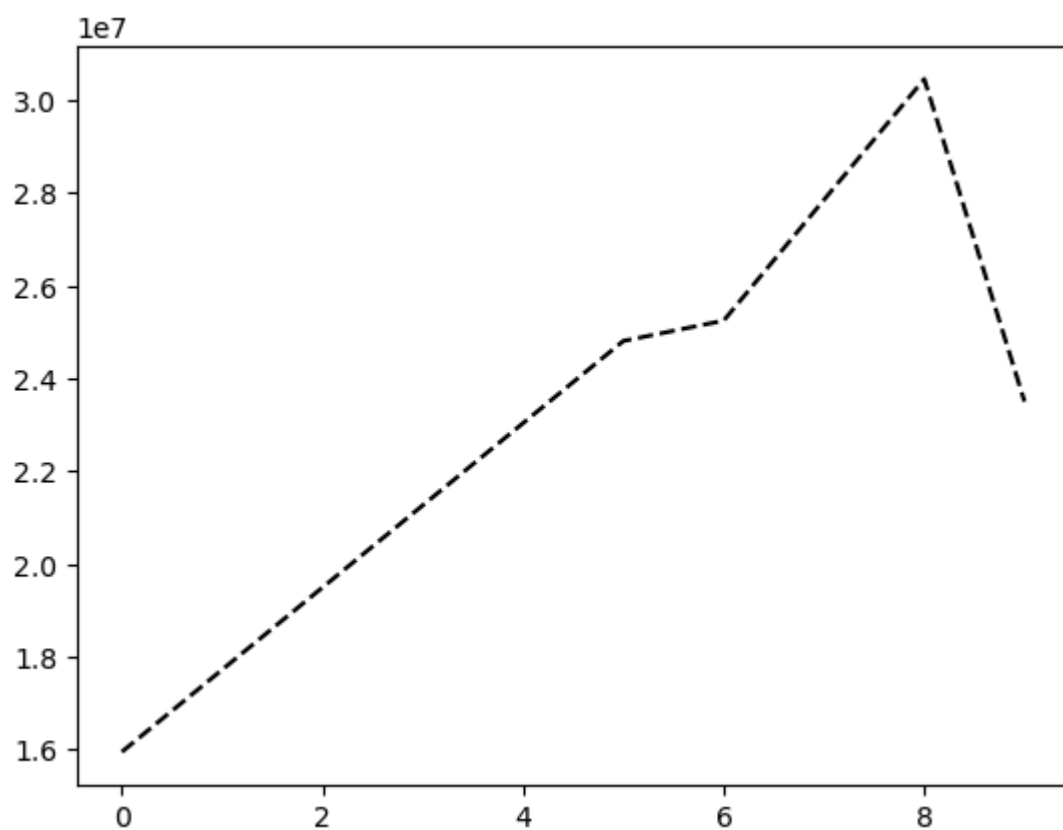
```
In [83]: plt.plot(Salary[0],c='red')  
plt.show()
```



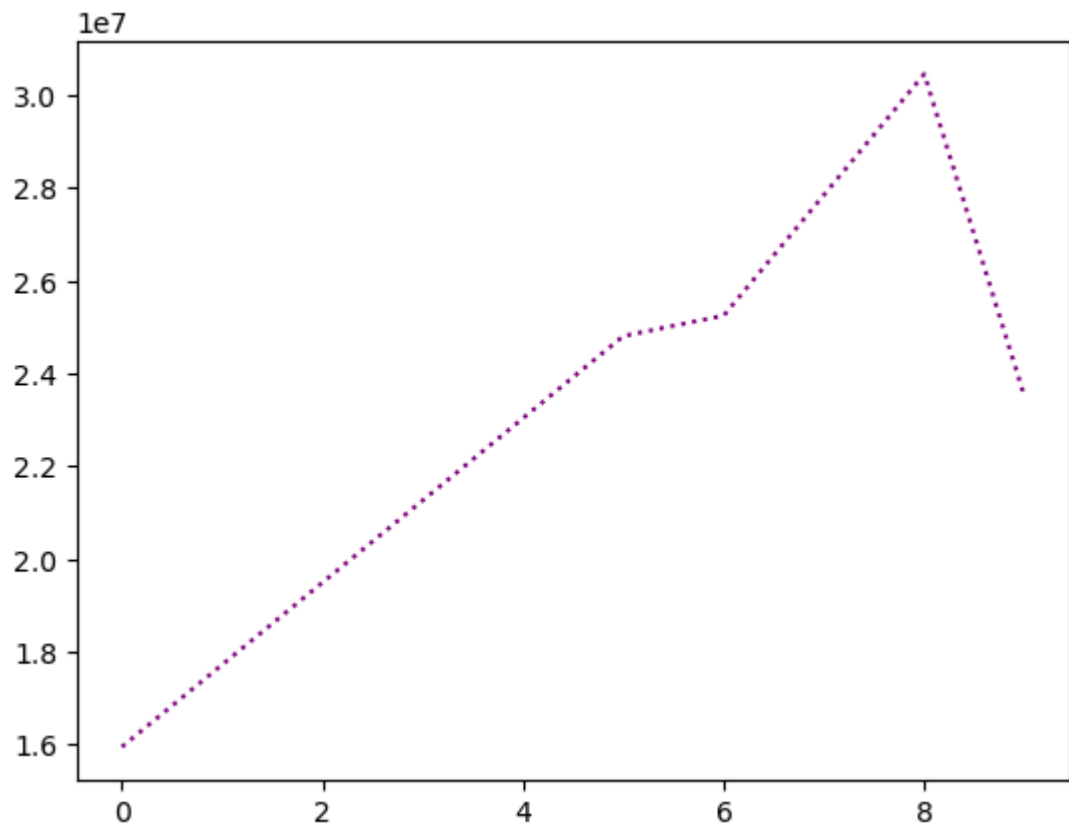
```
In [85]: plt.plot(Salary[0],color='k')  
plt.show()
```



```
In [86]: plt.plot(Salary[0], color = 'k', ls = '--')  
plt.show()
```

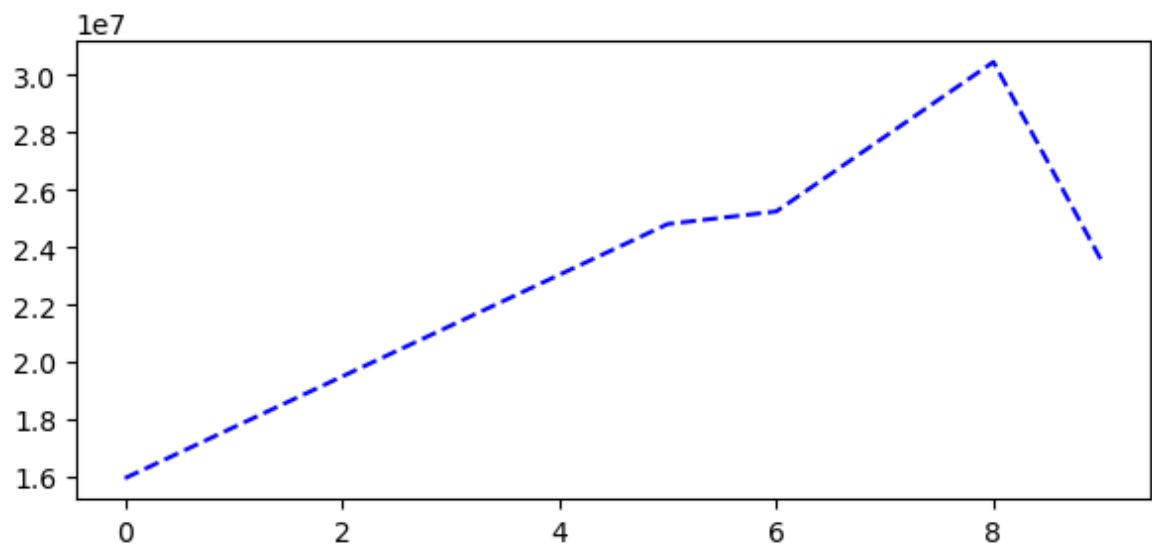


```
In [89]: plt.plot(Salary[0], c='purple', ls = 'dotted')  
plt.show()
```

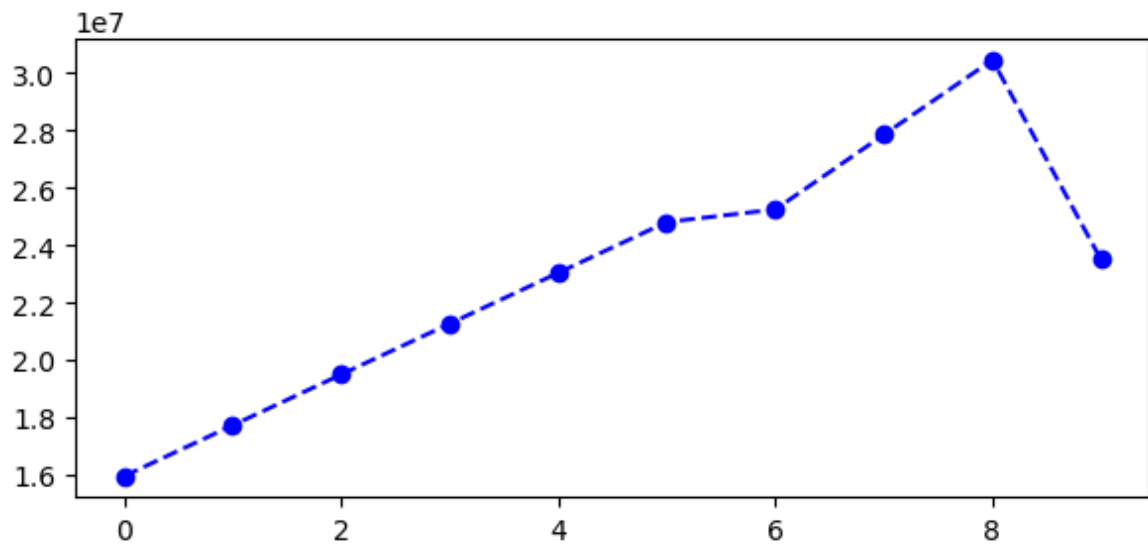


```
In [91]: %matplotlib inline  
plt.rcParams['figure.figsize'] = 7,3
```

```
In [93]: plt.plot(Salary[0], c='Blue', ls = '--')  
plt.show()
```



```
In [95]: plt.plot(Salary[0],c='Blue',ls = '--',marker = 'o')  
plt.show()
```

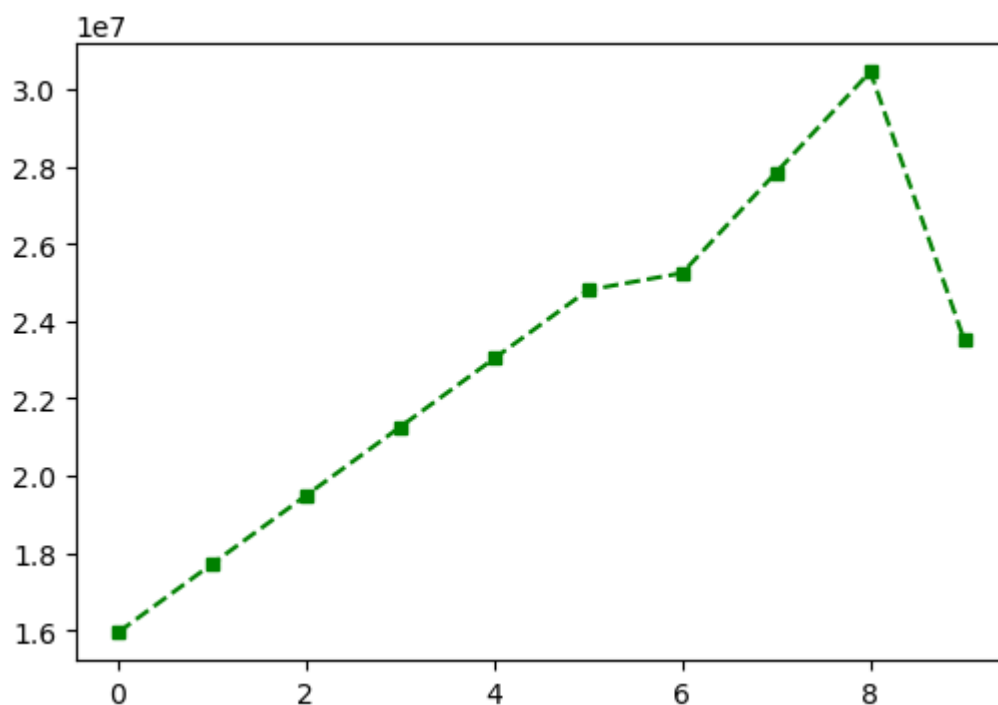


In [97]: Games

```
Out[97]: 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 [99]: %matplotlib inline
plt.rcParams['figure.figsize'] = 6,4
```

```
In [101... plt.plot(Salary[0],c = 'Green', ls = '--',marker = 's',ms = 5)
plt.show()
```



In [103... `list(range(0,10))`

Out[103... `[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]`

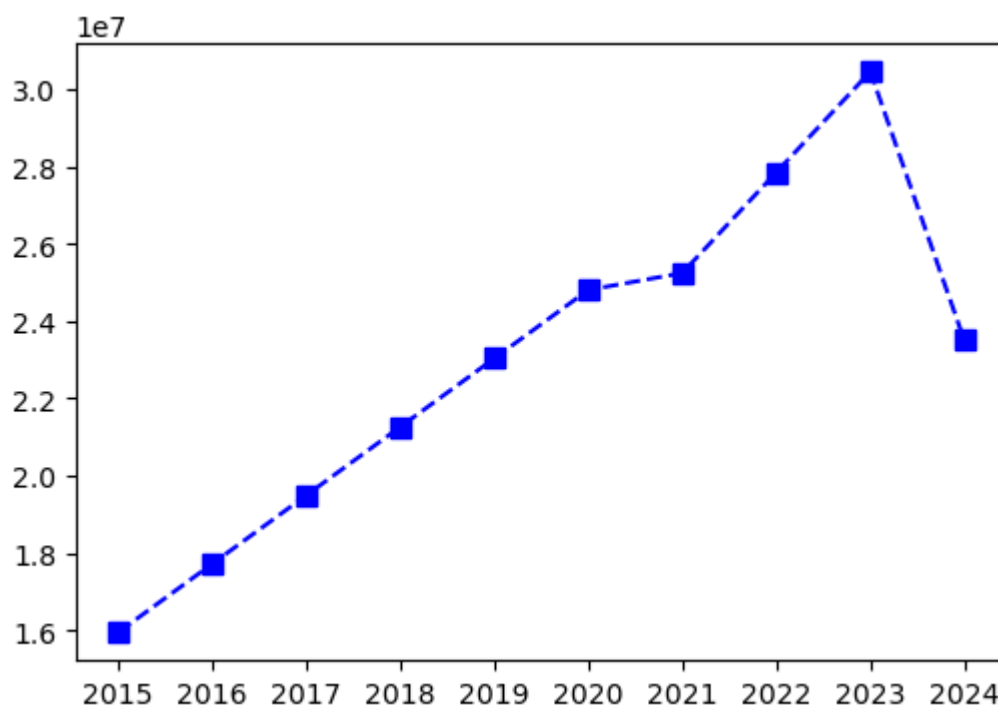
In [105... `Sdict`

Out[105... `{'2015': 0,
'2016': 1,
'2017': 2,
'2018': 3,
'2019': 4,
'2020': 5,
'2021': 6,
'2022': 7,
'2023': 8,
'2024': 9}`

In [107... `Pdict`

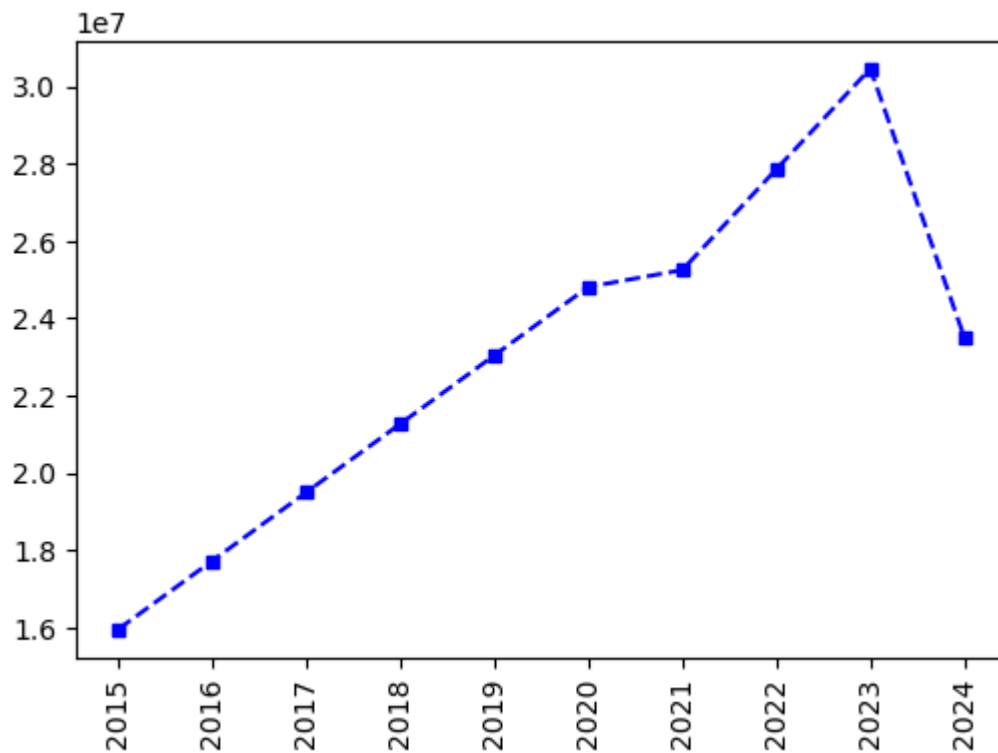
Out[107... `{'Sachin': 0,
'Rahul': 1,
'Smith': 2,
'Sami': 3,
'Pollard': 4,
'Morris': 5,
'Samson': 6,
'Dhoni': 7,
'Kohli': 8,
'Sky': 9}`

In [109... `plt.plot(Salary[0], c='blue', ls='--', marker = 's', ms= 7)
plt.xticks(list(range(0,10)),Seasons)
plt.show()`

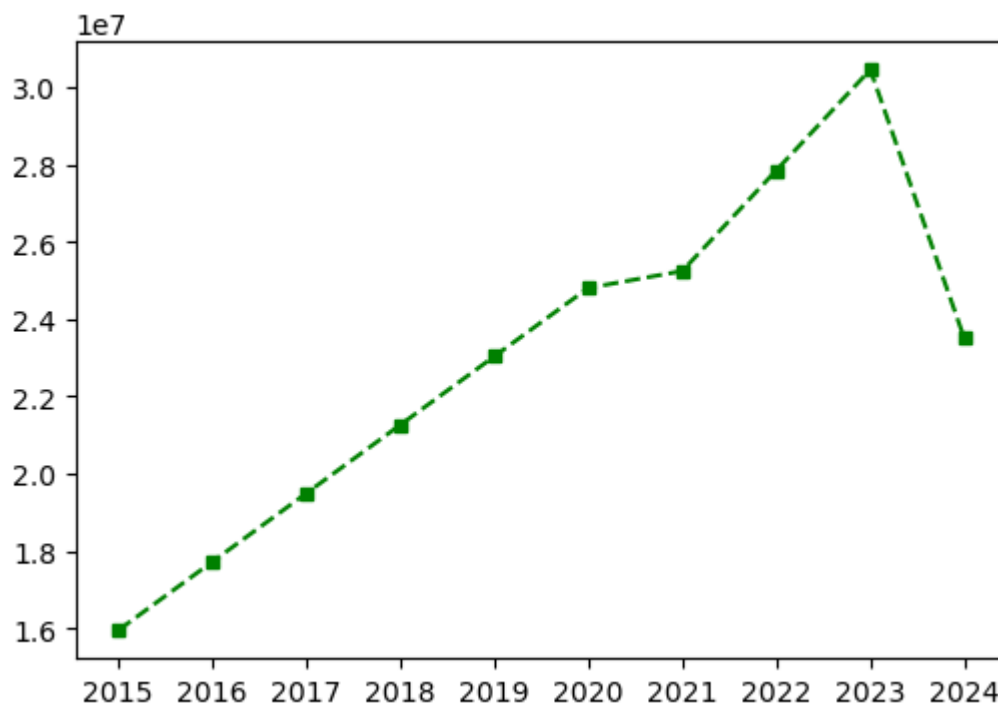


In [111... `plt.plot(Salary[0], c='blue', ls='--', marker = 's', ms= 5)
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')`

```
plt.show()
```



```
In [113... plt.plot(Salary[0], c='green', ls='--', marker = 's', ms= 5)
plt.xticks(list(range(0,10)),Seasons,rotation='horizontal')
plt.show()
```



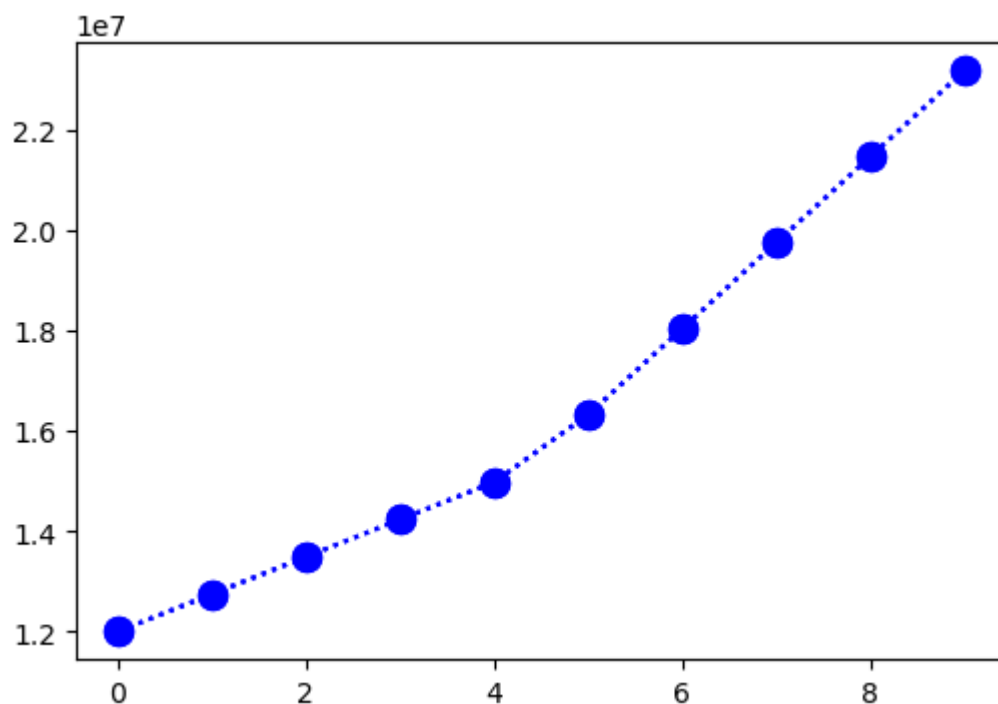
```
In [115... Salary[0]
```

```
Out[115... array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
       25244493, 27849149, 30453805, 23500000])
```

```
In [117... Salary[1]
```

```
Out[117...] array([12000000, 12744189, 13488377, 14232567, 14976754, 16324500,
      18038573, 19752645, 21466718, 23180790])
```

```
In [123...] plt.plot(Salary[1], c='Blue', ls = ':', marker = 'o', ms=10, label = Players[1])
plt.show()
```

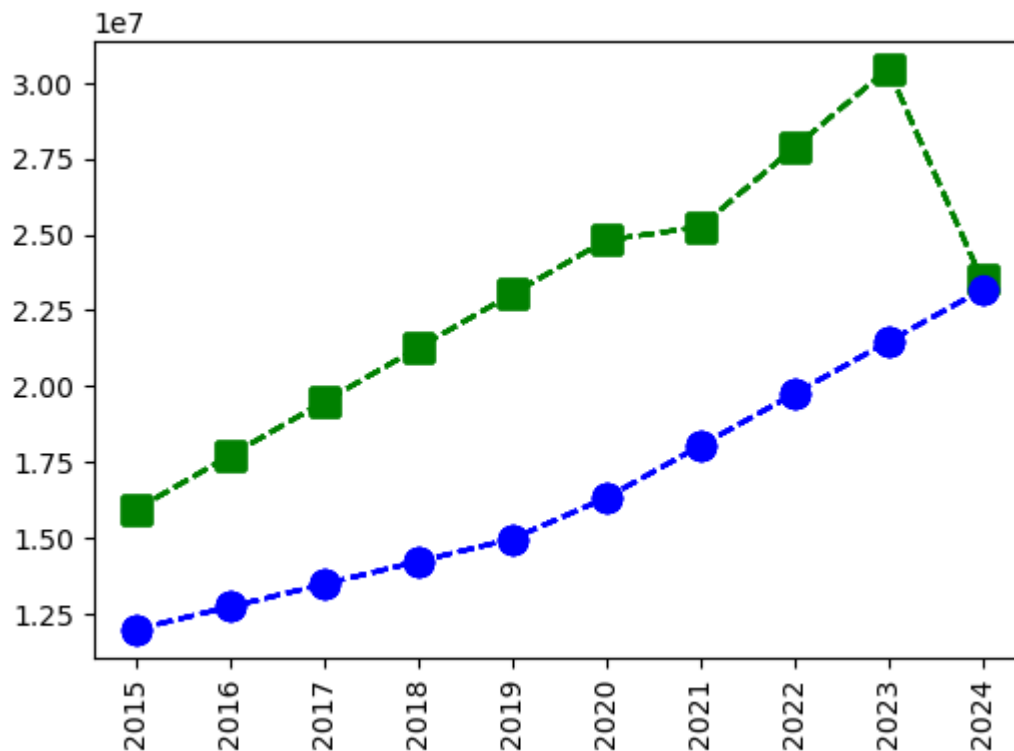


more visualization

```
In [142...] plt.plot(Salary [0], c = 'Green', ls = '--', marker = 's', ms = 10, label = Playe
plt.plot(Salary [1], c = 'Blue', ls = '--', marker = 'o', ms = 10, label = Player

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

plt.show()
```

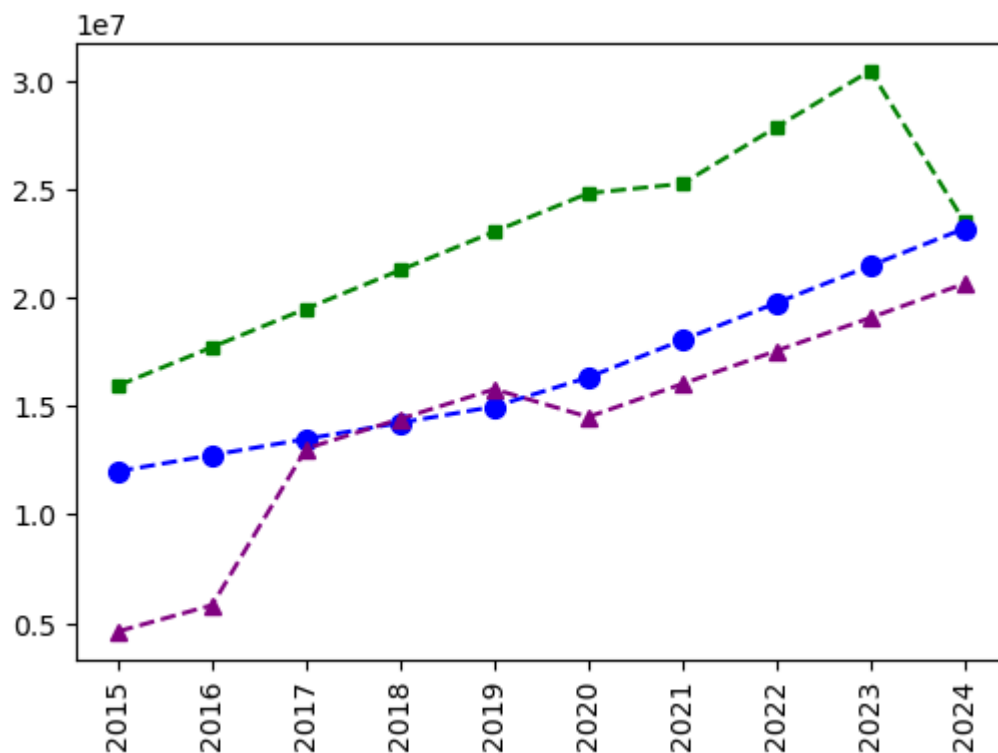


In [154...

```
plt.plot(Salary [0], c = 'Green', ls = '--', marker = 's', ms = 5, label = Player
plt.plot(Salary [1], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players
plt.plot(Salary [2], c = 'Purple', ls = '--', marker = '^', ms = 6, label =Players[

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

plt.show()
```



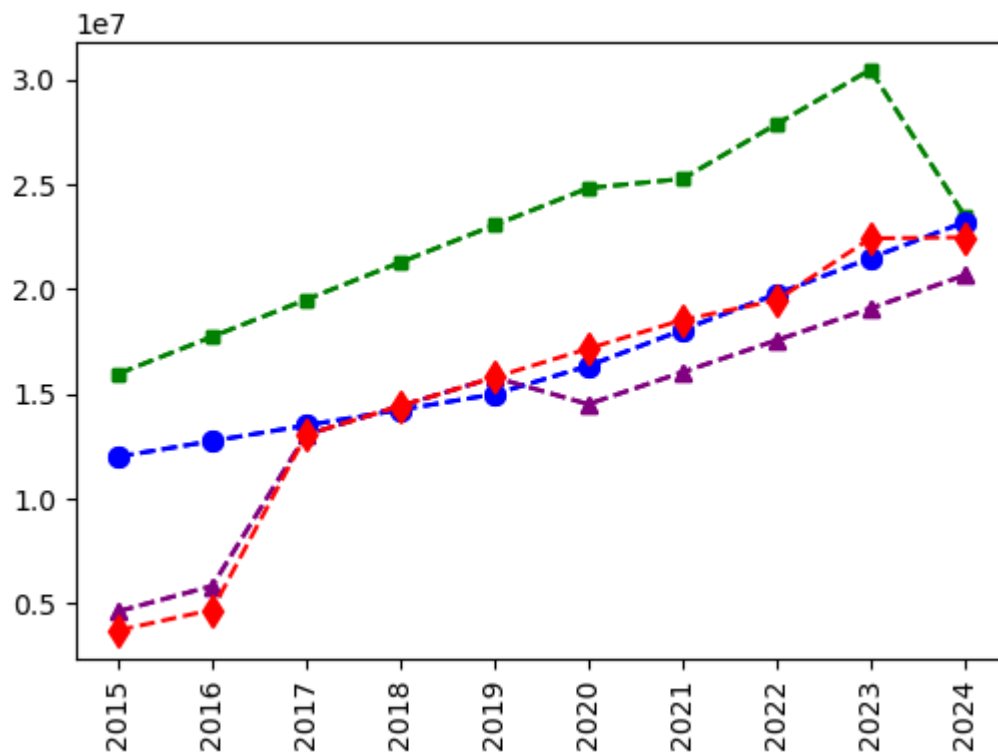
In [158...

```
plt.plot(Salary [0], c = 'Green', ls = '--', marker = 's', ms = 5, label = Player
plt.plot(Salary [1], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players
plt.plot(Salary [2], c = 'Purple', ls = '--', marker = '^', ms = 6, label =Players[
plt.plot(Salary [3], c = 'Red', ls = '--', marker = 'd', ms = 8, label = Players
```



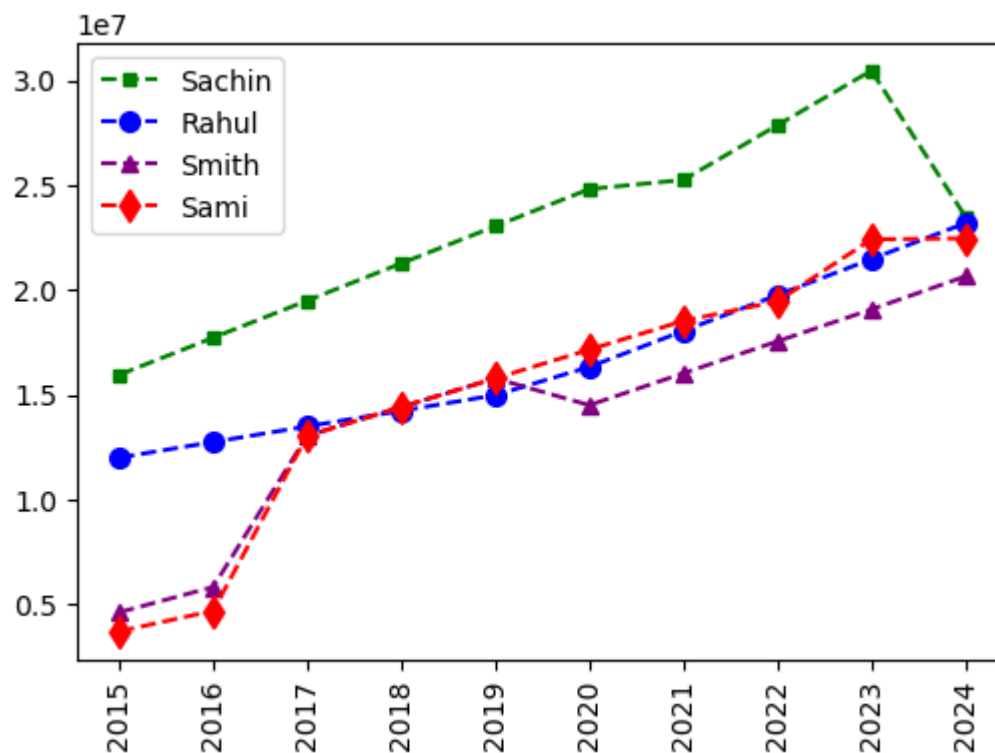
```
plt.xticks(list(range(0,10)),Seasons,rotation = 'vertical')

plt.show()
```



```
In [160... plt.plot(Salary [0], c = 'Green', ls = '--', marker = 's', ms = 5, label = Player
plt.plot(Salary [1], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players
plt.plot(Salary [2], c = 'Purple', ls = '--', marker = '^', ms = 6, label =Players[
plt.plot(Salary [3], c = 'Red', ls = '--', marker = 'd', ms = 8, label = Players
plt.legend()
plt.xticks(list(range(0,10)),Seasons,rotation = 'vertical')

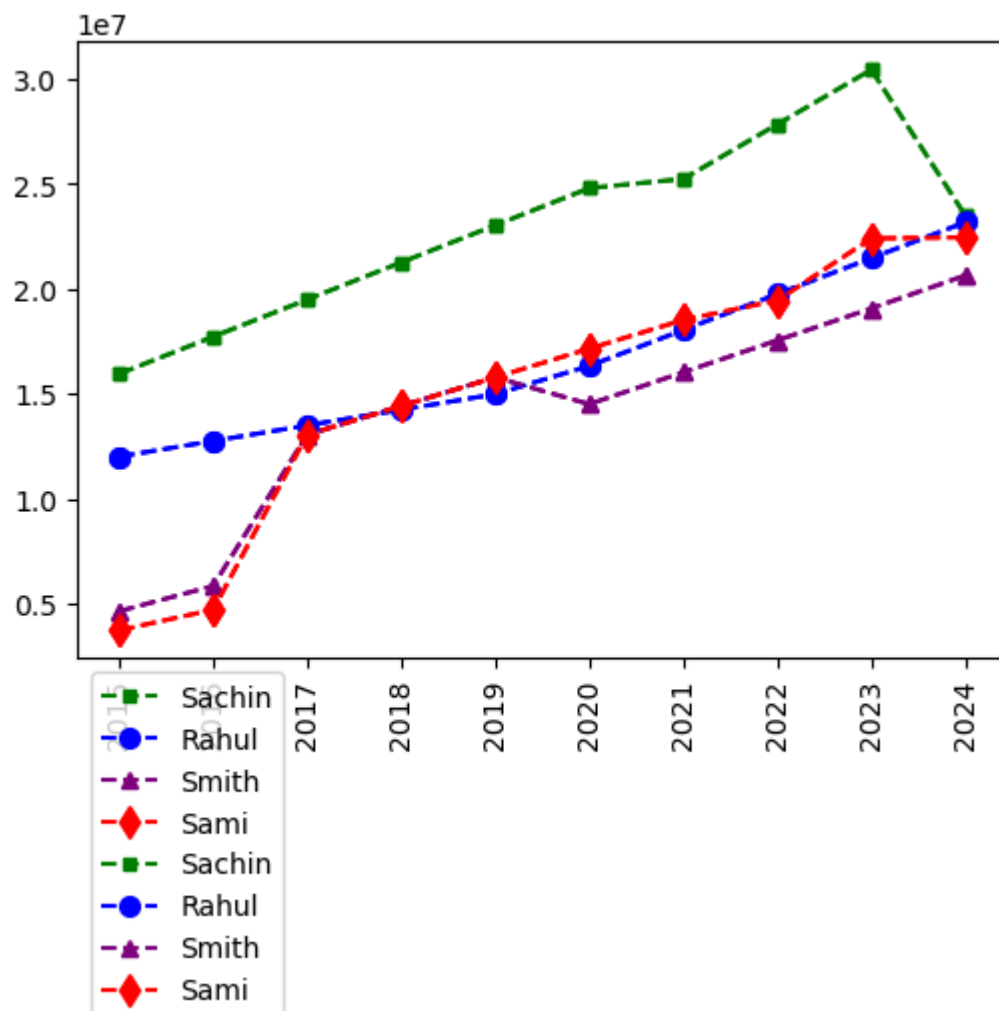
plt.show()
```



In [164...

```
plt.plot(Salary [0], c = 'Green', ls = '--', marker = 's', ms = 5, label = Player
plt.plot(Salary [1], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players
plt.plot(Salary [2], c = 'Purple', ls = '--', marker = '^', ms = 6, label = Players[
plt.plot(Salary [3], c = 'Red', ls = '--', marker = 'd', ms = 8, label = Players
plt.legend(loc = 'upper left',bbox_to_anchor=(0,0))
plt.xticks(list(range(0,10)),Seasons,rotation = 'vertical')

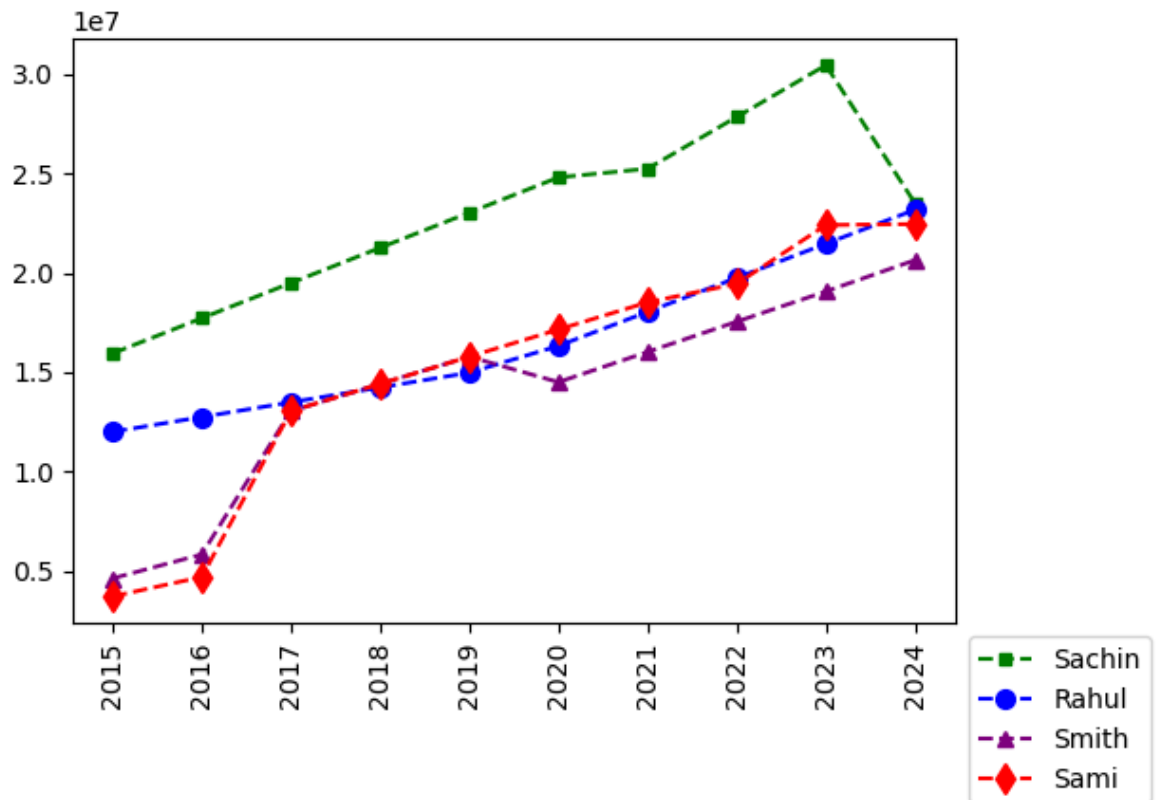
plt.show()
```



In [166...

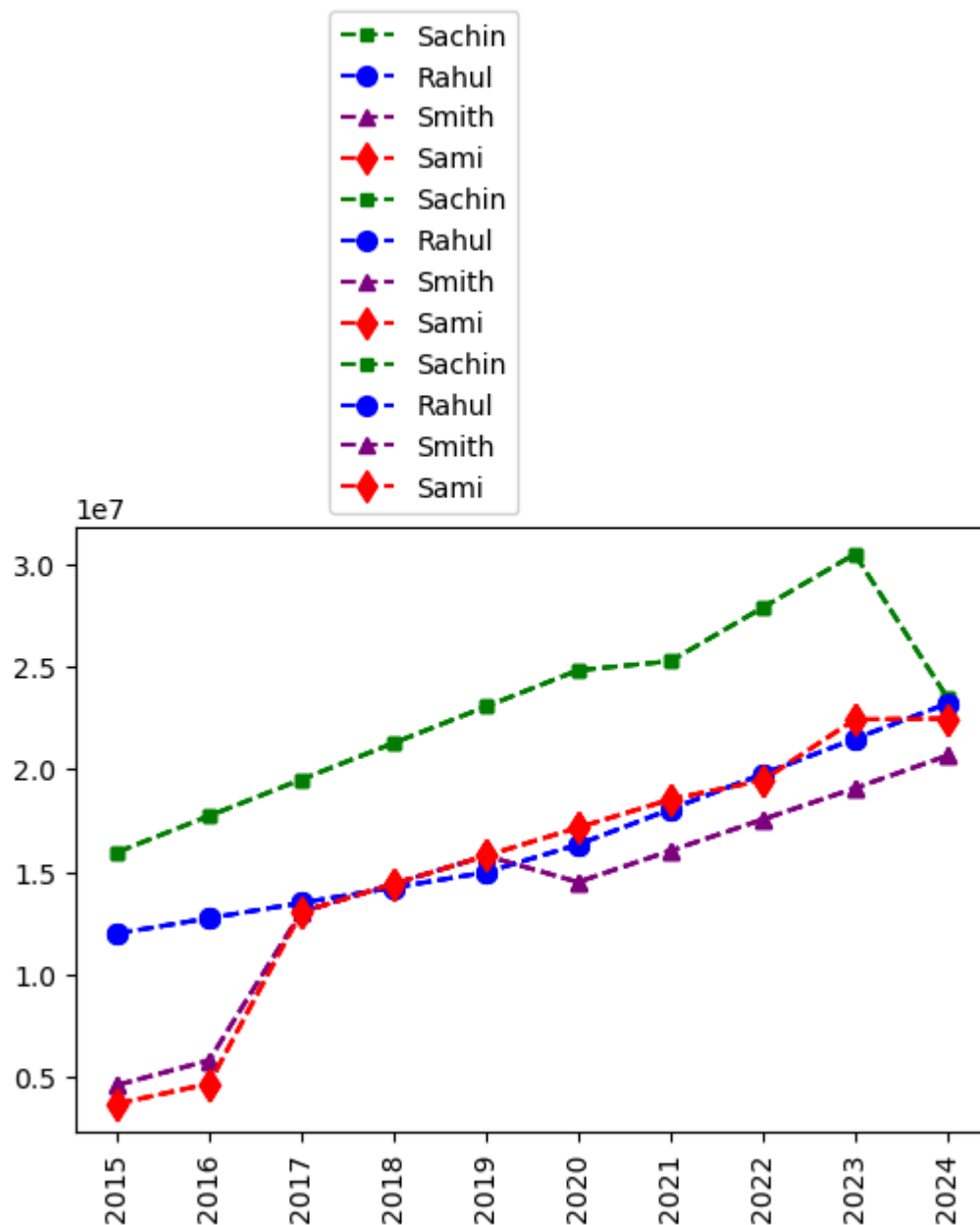
```
plt.plot(Salary [0], c = 'Green', ls = '--', marker = 's', ms = 5, label = Player
plt.plot(Salary [1], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players
plt.plot(Salary [2], c = 'Purple', ls = '--', marker = '^', ms = 6, label = Players[
plt.plot(Salary [3], c = 'Red', ls = '--', marker = 'd', ms = 8, label = Players
plt.legend(loc = 'upper left', bbox_to_anchor=(1,0))
plt.xticks(list(range(0,10)), Seasons, rotation = 'vertical')

plt.show()
```



```
In [172... plt.plot(Salary [0], c = 'Green', ls = '--', marker = 's', ms = 5, label = Player
plt.plot(Salary [1], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players
plt.plot(Salary [2], c = 'Purple', ls = '--', marker = '^', ms = 6, label = Players[
plt.plot(Salary [3], c = 'Red', ls = '--', marker = 'd', ms = 8, label = Players
plt.legend(loc = 'lower right', bbox_to_anchor=(0.5,1) )
plt.xticks(list(range(0,10)), Seasons, rotation = 'vertical')

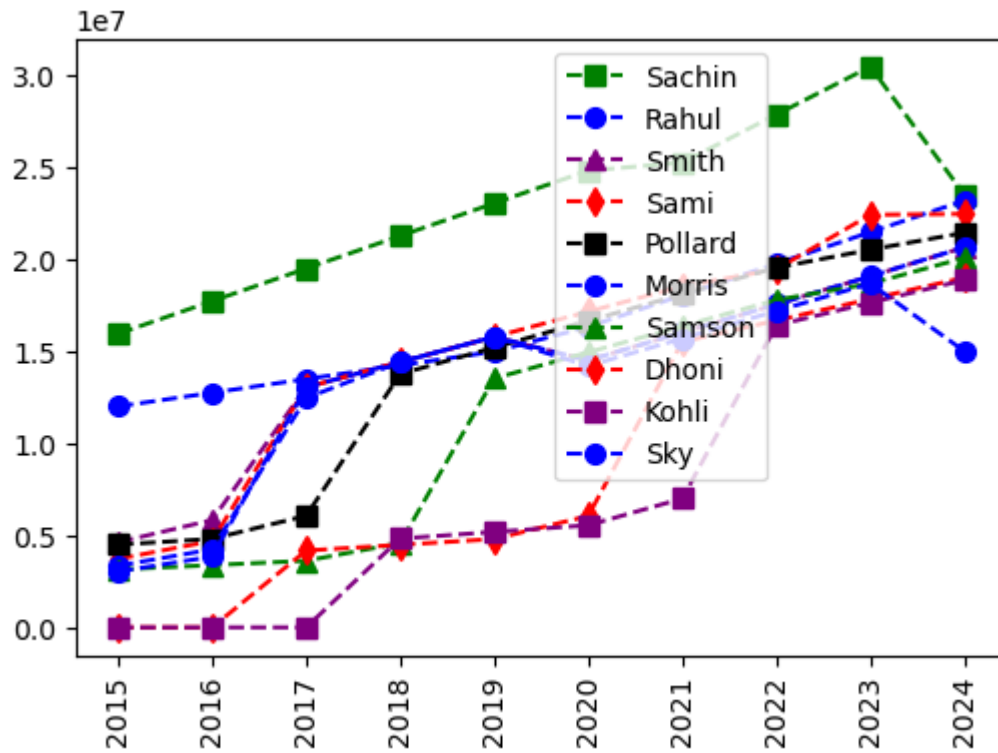
plt.show()
```



```
In [176... plt.plot(Salary [0], c = 'Green', ls = '--', marker = 's', ms = 7, label = Player
plt.plot(Salary [1], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players
plt.plot(Salary [2], c = 'Purple', ls = '--', marker = '^', ms = 7, label = Players[
plt.plot(Salary [3], c = 'Red', ls = '--', marker = 'd', ms = 7, label = Players
plt.plot(Salary [4], c = 'Black', ls = '--', marker = 's', ms = 7, label = Player
plt.plot(Salary [5], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players
plt.plot(Salary [6], c = 'Green', ls = '--', marker = '^', ms = 7, label = Players[6
plt.plot(Salary [7], c = 'Red', ls = '--', marker = 'd', ms = 7, label = Players
plt.plot(Salary [8], c = 'Purple', ls = '--', marker = 's', ms = 7, label = Player
plt.plot(Salary [9], c = 'Blue', ls = '--', marker = 'o', ms = 7, label = Players

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

plt.show()
```

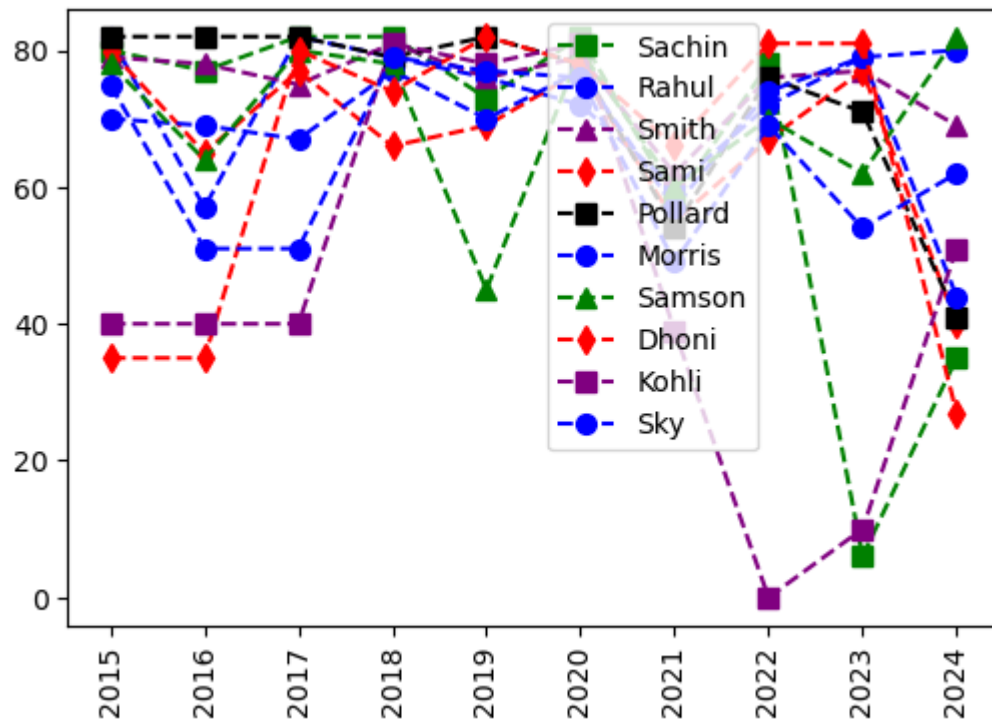


In [178...

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

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

plt.show()
```



In []: