

```

In [1]: #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 [2]: Salary

```

```
Out[2]: 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 [3]: Games

```
Out[3]: 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 [4]: Points

```
Out[4]: 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 [5]: Seasons

```
Out[5]: ['2015',
         '2016',
         '2017',
         '2018',
         '2019',
         '2020',
         '2021',
         '2022',
         '2023',
         '2024']
```

In [6]: Games[1]

Out[6]: array([82, 57, 82, 79, 76, 72, 60, 72, 79, 80])

In [7]: Games[0:6]

Out[7]: 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]])

In [8]: Salary

Out[8]: 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 [9]: Games

Out[9]: 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]: Salary/Games

C:\Users\hp\AppData\Local\Temp\ipykernel\_20008\3709746658.py:1: RuntimeWarning: divide by zero encountered in divide  
Salary/Games

```
Out[10]: 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 [11]: np.round(Salary//Games)
```

C:\Users\hp\AppData\Local\Temp\ipykernel\_20008\3663165759.py:1: RuntimeWarning: divide by zero encountered in floor\_divide  
 np.round(Salary//Games)

```
Out[11]: array([[ 199335,  230113,  237690,  259298,  315539,  302515,  435249,
                  357040,  5075634,  671428],
                [ 146341,  223582,  164492,  180159,  197062,  226729,  300642,
                  274342,  271730,  289759],
                [  58503,   74719,  173883,  177908,  207630,  183544,  258427,
                  230855,  247629,  299194],
                [  46420,   72216,  169366,  218342,  228694,  222717,  336701,
                  290298,  291006,  561450],
                [  54794,   58618,   73917,  174151,  185397,  213425,  335032,
                  257057,  288918,  522835],
                [  47828,   61380,  185895,  187150,  225427,  188311,  281096,
                  237094,  241360,  469190],
                [  40310,   52815,   45199,   58643,  300455,  186751,  272663,
                  253992,  301103,  244738],
                [     0,     0,   52140,   60595,   58498,   77611,  234948,
                  205797,  220155,  703541],
                [     0,     0,     0,   59540,   66467,   68471,  179325,
                   0, 1763268,  369860],
                [  40425,   75322,  255710,  182412,  204933,  186842,  320224,
                  249014,  345796,  241935]])
```

```
In [12]: import warnings
         warnings.filterwarnings('ignore')

         #we are using above code to ignore unknown error cause by as updation on monthL
```

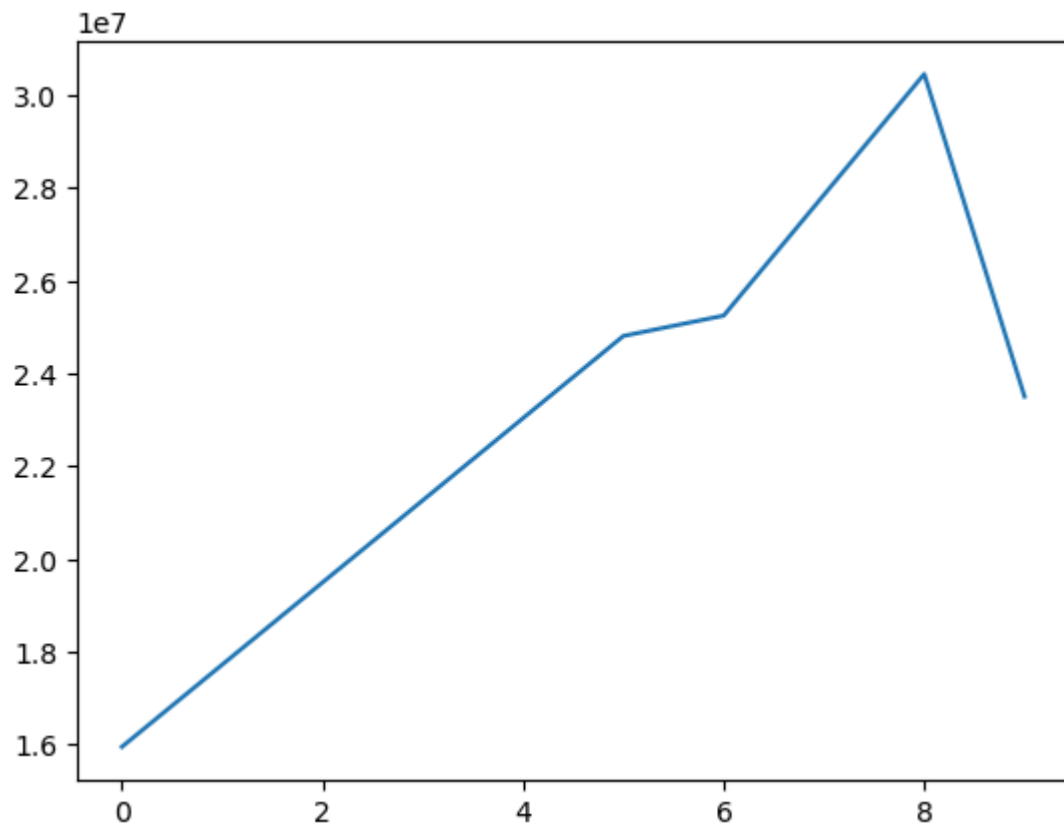
```
In [13]: import matplotlib.pyplot as plt
         import numpy as np
```

```
In [14]: Salary[0]
```

```
Out[14]: array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
                25244493, 27849149, 30453805, 23500000])
```

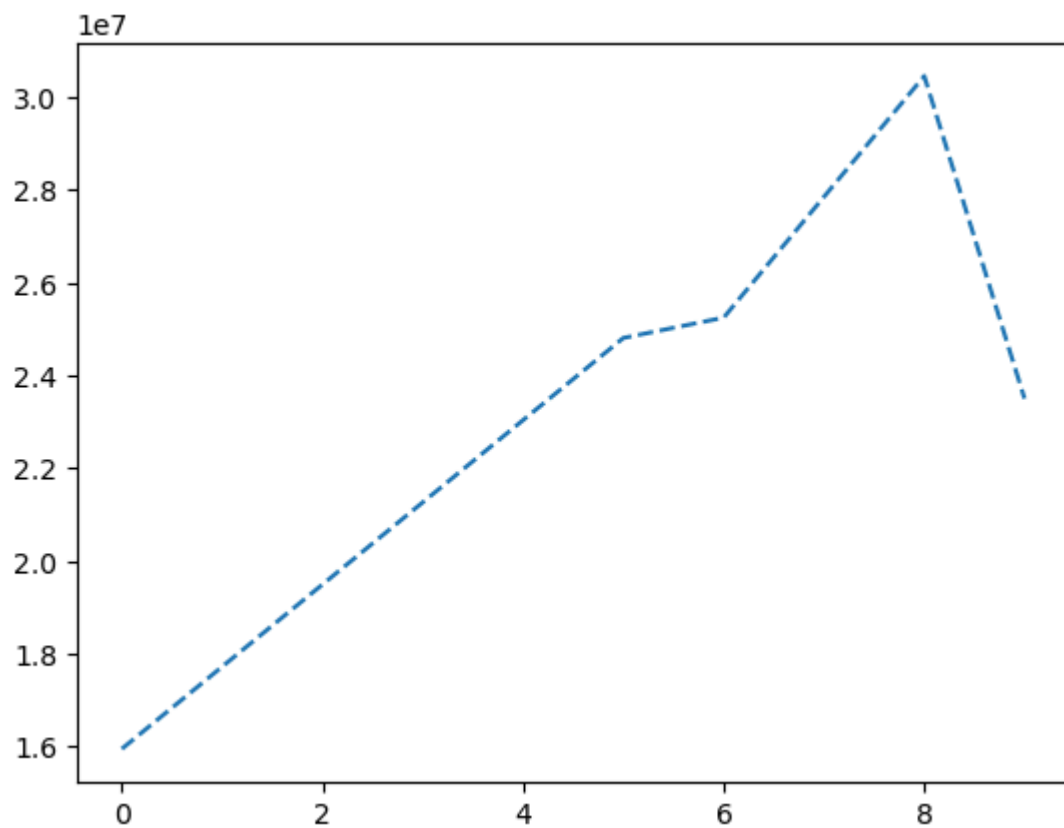
```
In [15]: plt.plot(Salary[0])
```

```
Out[15]: [<matplotlib.lines.Line2D at 0x2c34b6091d0>]
```



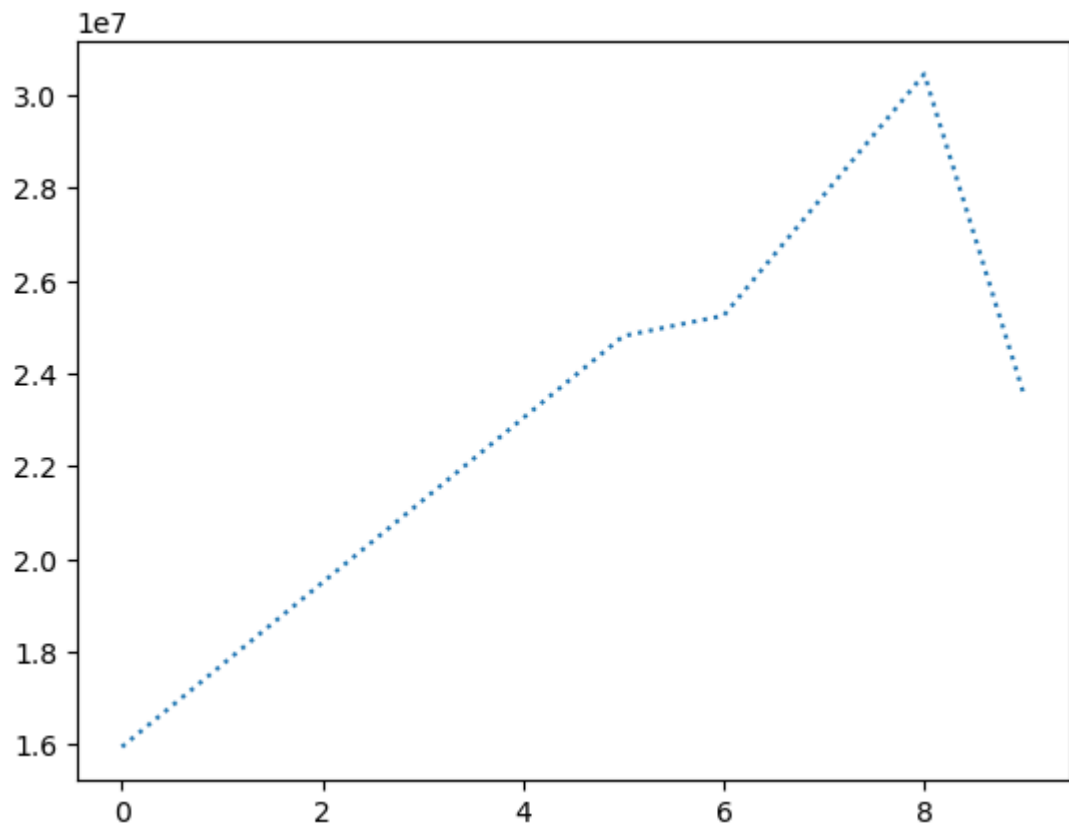
```
In [16]: plt.plot(Salary[0],ls = '--')
```

```
Out[16]: [<matplotlib.lines.Line2D at 0x2c34d885810>]
```



```
In [17]: plt.plot(Salary[0],ls=':')
```

```
Out[17]: [<matplotlib.lines.Line2D at 0x2c34b6cc7d0>]
```



In [ ]:

In [18]: `plt.plot(Salary[0],ls='.',')`

```

-----
ValueError                                Traceback (most recent call last)
Cell In[18], line 1
----> 1 plt.plot(Salary[0],ls='.',')

File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3829, in plot(
scalex, scaley, data, *args, **kwargs)
    3821 @_copy_docstring_and_deprecators(Axes.plot)
    3822 def plot(
    3823     *args: float | ArrayLike | str,
    3824     (...)
    3825     **kwargs,
    3826 ) -> list[Line2D]:
-> 3829     return gca().plot(
    3830         *args,
    3831         scalex=scalex,
    3832         scaley=scaley,
    3833         **({"data": data} if data is not None else {}),
    3834         **kwargs,
    3835     )

File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:1777, in
Axes.plot(self, scalex, scaley, data, *args, **kwargs)
    1534 """
    1535 Plot y versus x as lines and/or markers.
    1536
    1537 (...)
    1774 (``'green'``) or hex strings (``'#008000'``).
    1775 """
    1776 kwargs = cbook.normalize_kwargs(kwargs, mlines.Line2D)
-> 1777 lines = [*self._get_lines(self, *args, data=data, **kwargs)]
    1778 for line in lines:
    1779     self.add_line(line)

File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:297, in
_process_plot_var_args.__call__(self, axes, data, return_kwargs, *args, **kwargs)
    295     this += args[0],
    296     args = args[1:]
--> 297 yield from self._plot_args(
    298     axes, this, kwargs, ambiguous_fmt_datakey=ambiguous_fmt_datakey,
    299     return_kwargs=return_kwargs
    300 )

File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:546, in
_process_plot_var_args._plot_args(self, axes, tup, kwargs, return_kwargs, ambiguous_
fmt_datakey)
    544     return list(result)
    545 else:
--> 546     return [l[0] for l in result]

File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:539, in
<genexpr>(.0)
    534 else:
    535     raise ValueError(
    536         f"label must be scalar or have the same length as the input "
    537         f"data, but found {len(label)} for {n_datasets} datasets.")
--> 539 result = (make_artist(axes, x[:, j % ncx], y[:, j % ncy], kw,
    540                     **kwargs, 'label': label))
    541     for j, label in enumerate(labels))
    543 if return_kwargs:

```



```
544     return list(result)
```

File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\axes\\_base.py:338, in \_process\_plot\_var\_args.\_make\_line(self, axes, x, y, kw, kwargs)

```
336 kw = {**kw, **kwargs} # Don't modify the original kw.
337 self._setdefaults(self._getdefaults(kw), kw)
--> 338 seg = mlines.Line2D(x, y, **kw)
339 return seg, kw
```

File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\lines.py:372, in Line2D.\_\_init\_\_(self, xdata, ydata, linewidth, linestyle, color, gapcolor, marker, markersize, markeredgewidth, markeredgecolor, markerfacecolor, markerfacecoloralt, fillstyle, antialiased, dash\_capstyle, solid\_capstyle, dash\_joinstyle, solid\_joinstyle, pickradius, drawstyle, markevery, \*\*kwargs)

```
369 self._dash_pattern = (0, None) # offset, dash (scaled by linewidth)
371 self.set_linewidth(linewidth)
--> 372 self.set_linestyle(linestyle)
373 self.set_drawstyle(drawstyle)
375 self._color = None
```

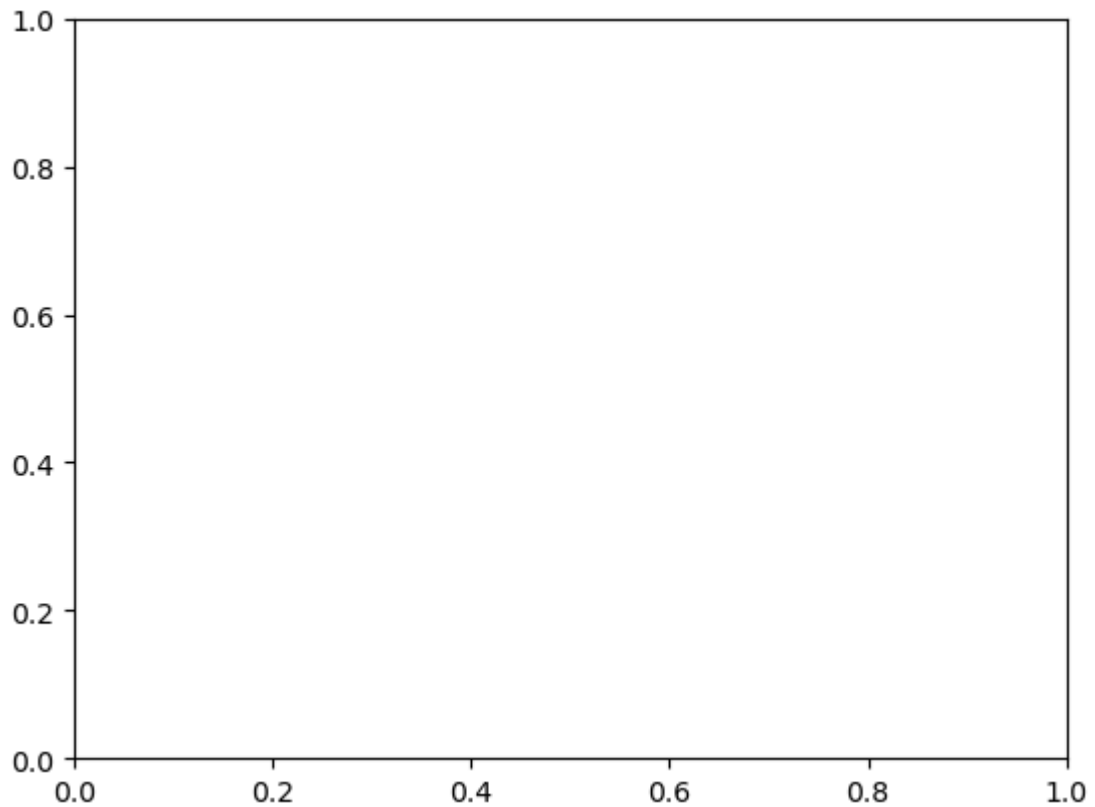
File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\lines.py:1178, in Line2D.set\_linestyle(self, ls)

```
1176 if ls in [' ', '', 'none']:
1177     ls = 'None'
-> 1178 _api.check_in_list([*self._lineStyles, *ls_mapper_r], ls=ls)
1179 if ls not in self._lineStyles:
1180     ls = ls_mapper_r[ls]
```

File C:\ProgramData\anaconda3\Lib\site-packages\matplotlib\\_api\\_\_init\_\_.py:130, in check\_in\_list(values, \_print\_supported\_values, \*\*kwargs)

```
128 if _print_supported_values:
129     msg += f"; supported values are {' '.join(map(repr, values))}"
--> 130 raise ValueError(msg)
```

**ValueError:** '.,' is not a valid value for ls; supported values are '-', '--', '-.', ':', 'None', ' ', '', 'solid', 'dashed', 'dashdot', 'dotted'



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

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

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

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

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

```
In [ ]: plt.plot(Salary[0], ls = '--',color = 'green',marker = 's',ms = 8)
```

```
In [ ]: plt.plot(Salary[0:5],ls='--')
```

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

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

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

```
In [ ]: plt.plot(Salary[0],ls='-',color='orange',marker='o')
```

```
In [ ]: plt.plot(Salary[0],ls='-',color='gradientblue',marker='o')
```

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

```
In [ ]: plt.plot(Salary[0],ls='-',color='inkblue',marker='o')
```

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

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

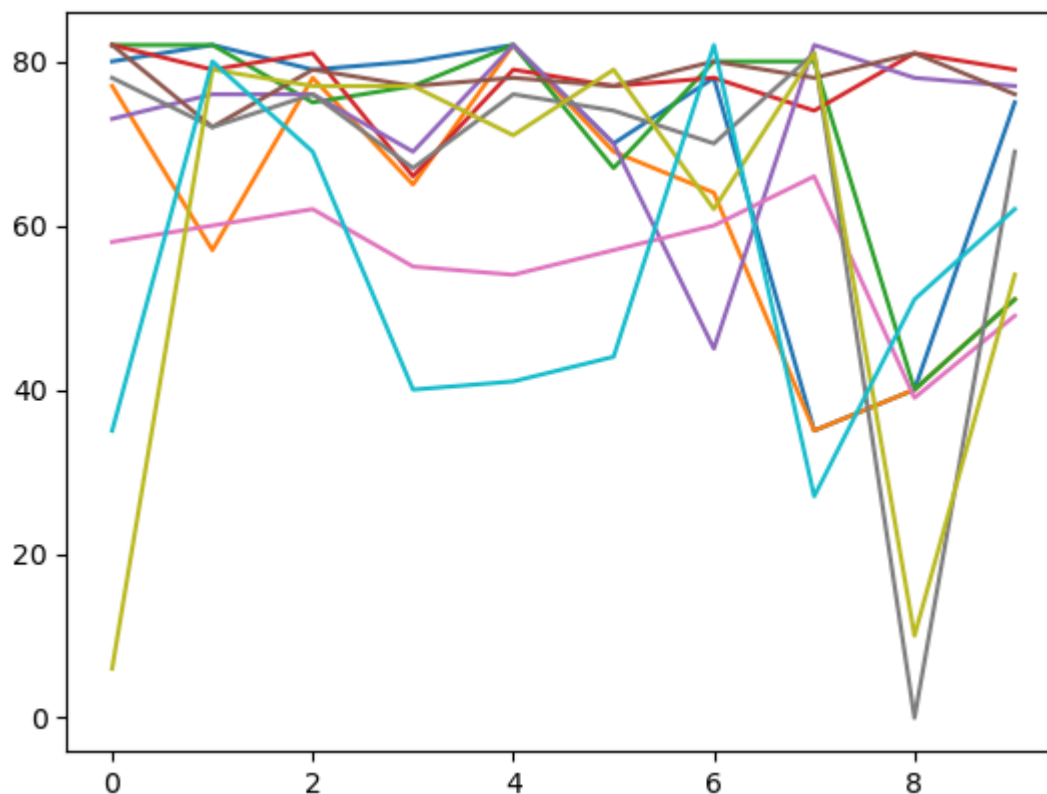
```
In [ ]: plt.plot(Salary[0],ls='--',marker='p')
```

```
In [ ]: plt.plot(Salary[0],ls='--',color='green',marker='s',ms=100)
```

```
In [ ]: plt.plot(Salary[8],ls='--',color='blue',marker='o')
```

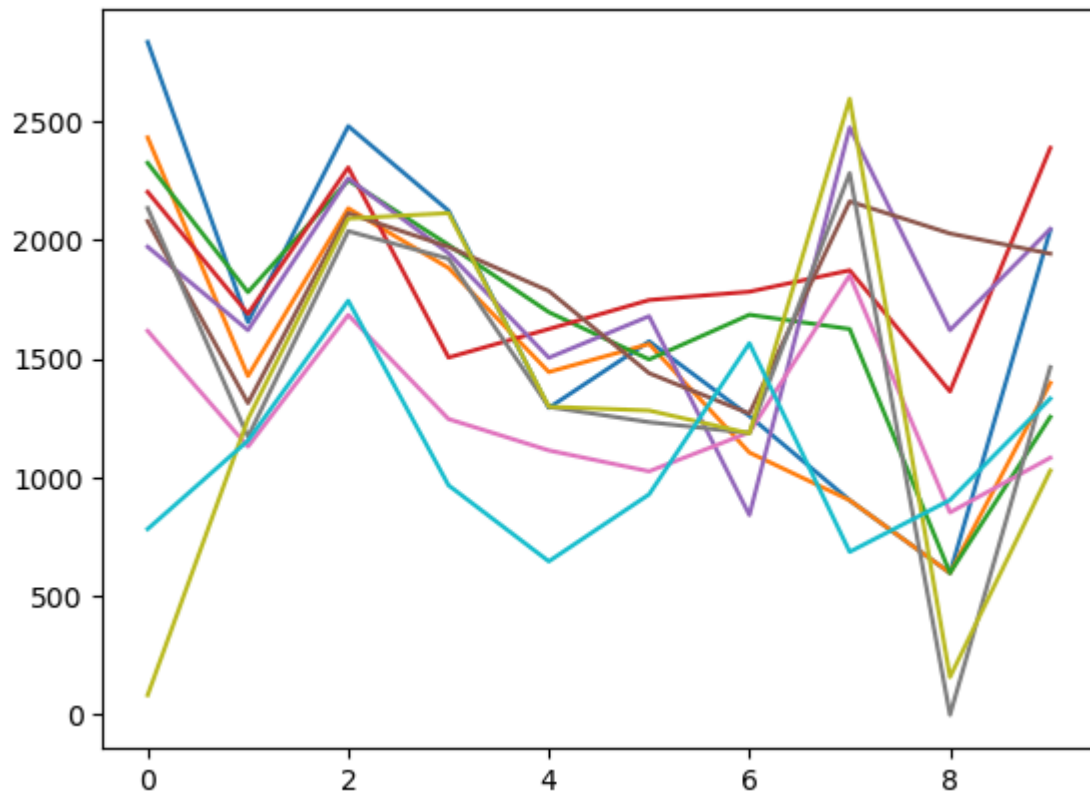
```
In [19]: plt.plot(Games,ls='--')
```

```
Out[19]: [<matplotlib.lines.Line2D at 0x2c35369f110>,
<matplotlib.lines.Line2D at 0x2c35369f250>,
<matplotlib.lines.Line2D at 0x2c35369f390>,
<matplotlib.lines.Line2D at 0x2c35369f4d0>,
<matplotlib.lines.Line2D at 0x2c35369f610>,
<matplotlib.lines.Line2D at 0x2c35369f750>,
<matplotlib.lines.Line2D at 0x2c35369f890>,
<matplotlib.lines.Line2D at 0x2c35369f9d0>,
<matplotlib.lines.Line2D at 0x2c35369fb10>,
<matplotlib.lines.Line2D at 0x2c35369fc50>]
```



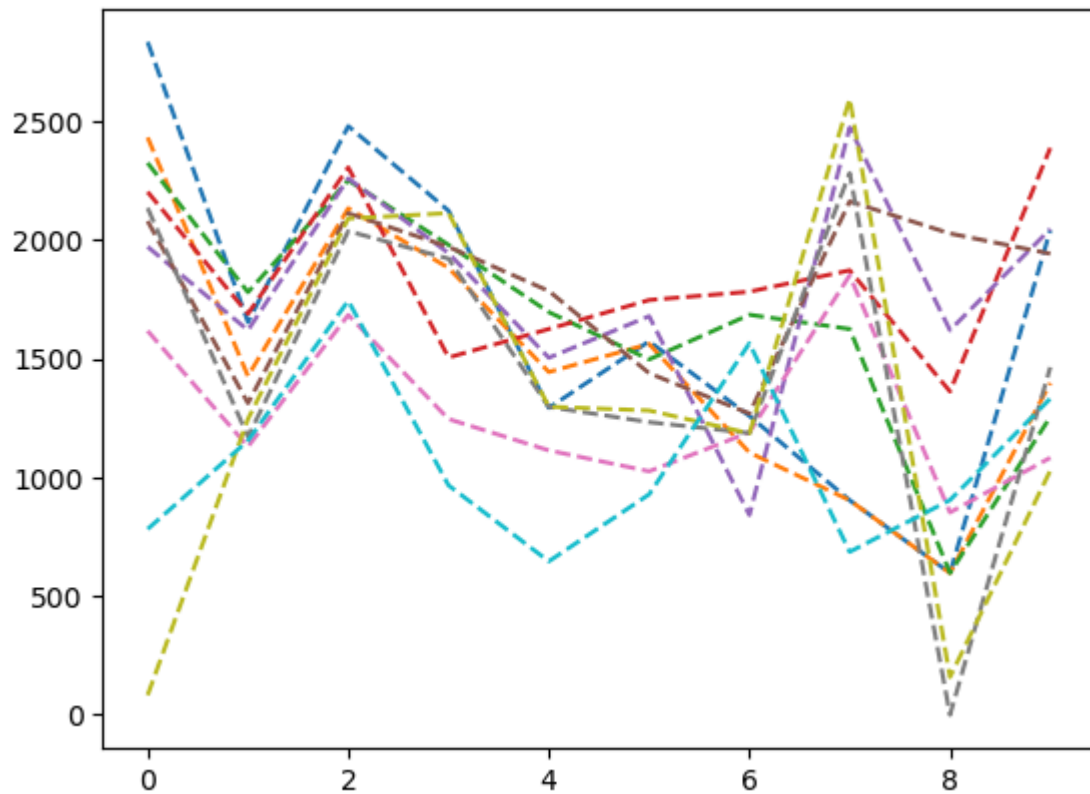
```
In [20]: plt.plot(Points)
```

```
Out[20]: [<matplotlib.lines.Line2D at 0x2c35370cf50>,
<matplotlib.lines.Line2D at 0x2c35370d090>,
<matplotlib.lines.Line2D at 0x2c35370d1d0>,
<matplotlib.lines.Line2D at 0x2c35370d310>,
<matplotlib.lines.Line2D at 0x2c35370d450>,
<matplotlib.lines.Line2D at 0x2c35370d590>,
<matplotlib.lines.Line2D at 0x2c35370d6d0>,
<matplotlib.lines.Line2D at 0x2c35370d810>,
<matplotlib.lines.Line2D at 0x2c35370d950>,
<matplotlib.lines.Line2D at 0x2c35370da90>]
```



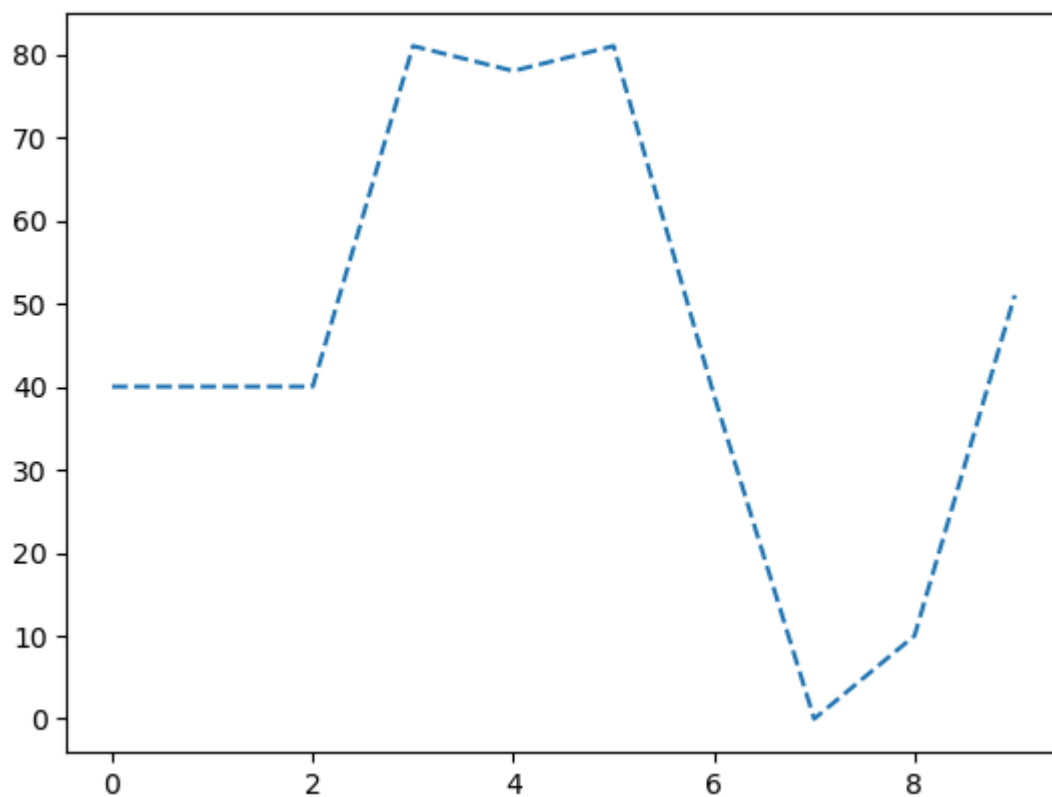
```
In [21]: plt.plot(Points,ls='--')
```

```
Out[21]: [<matplotlib.lines.Line2D at 0x2c3538d3110>,  
<matplotlib.lines.Line2D at 0x2c3538d3250>,  
<matplotlib.lines.Line2D at 0x2c3538d3390>,  
<matplotlib.lines.Line2D at 0x2c3538d34d0>,  
<matplotlib.lines.Line2D at 0x2c3538d3610>,  
<matplotlib.lines.Line2D at 0x2c3538d3750>,  
<matplotlib.lines.Line2D at 0x2c3538d3890>,  
<matplotlib.lines.Line2D at 0x2c3538d39d0>,  
<matplotlib.lines.Line2D at 0x2c3538d3b10>,  
<matplotlib.lines.Line2D at 0x2c3538d3c50>]
```

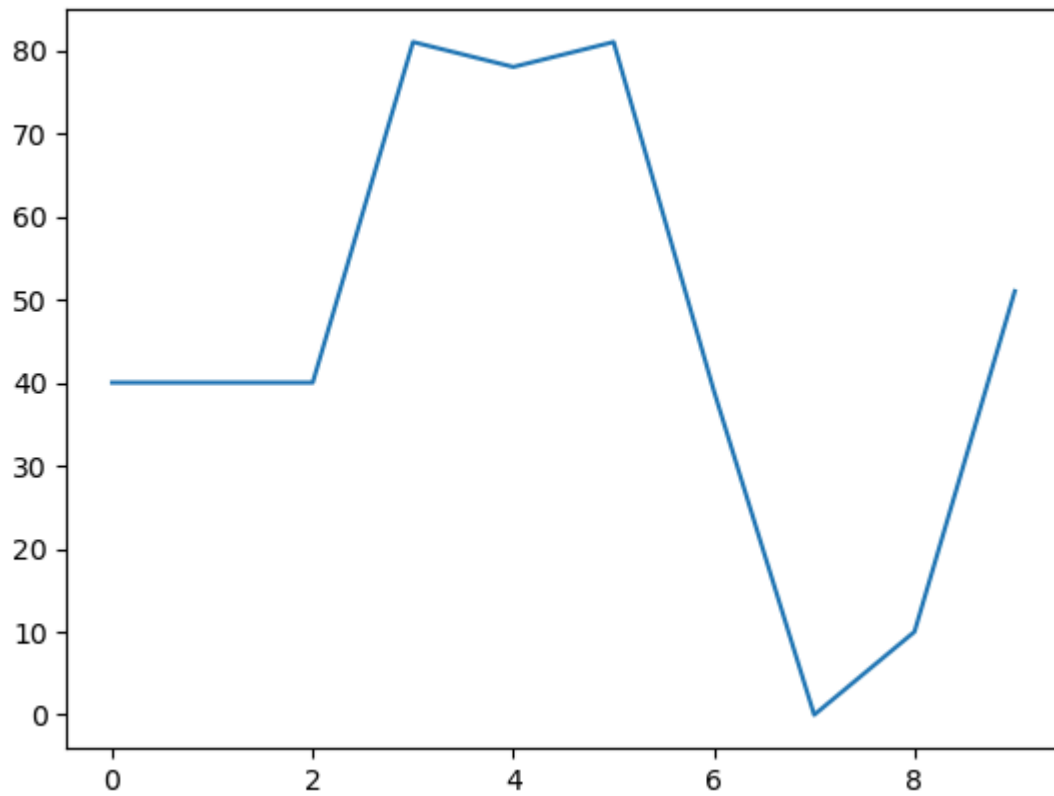


```
In [22]: plt.plot(Games[8],ls='--')
```

```
Out[22]: [<matplotlib.lines.Line2D at 0x2c353711310>]
```

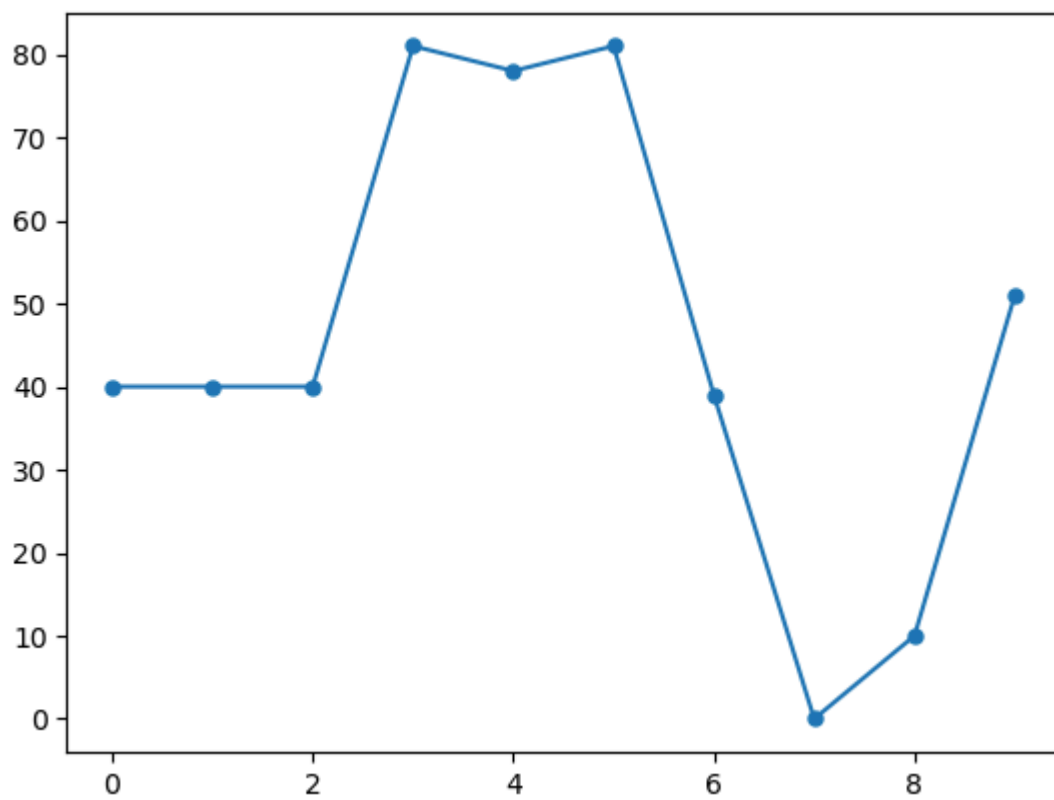


```
In [23]: plt.plot(Games[8])
plt.show()
```



```
In [24]: plt.plot(Games[8],ls='-',marker='o',ms=5)
```

```
Out[24]: [matplotlib.lines.Line2D at 0x2c353a32d50>]
```



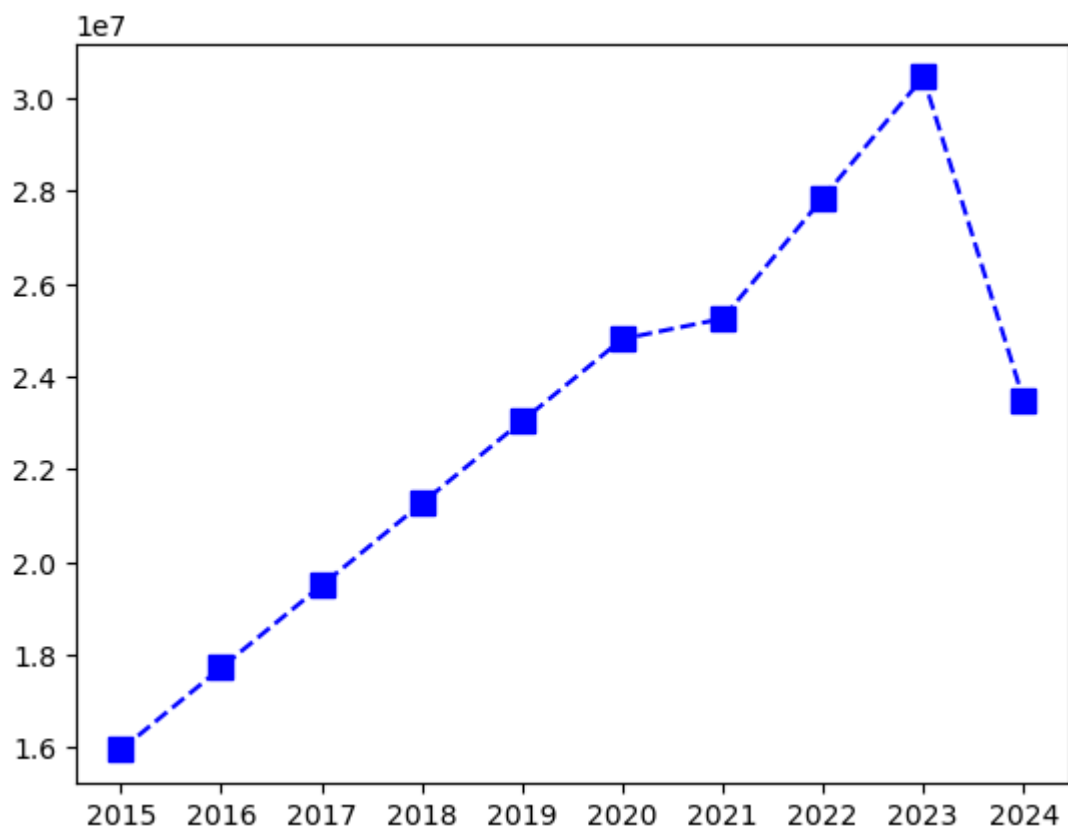
```
In [25]: Sdict
```

```
Out[25]: {'2015': 0,
          '2016': 1,
          '2017': 2,
          '2018': 3,
          '2019': 4,
          '2020': 5,
          '2021': 6,
          '2022': 7,
          '2023': 8,
          '2024': 9}
```

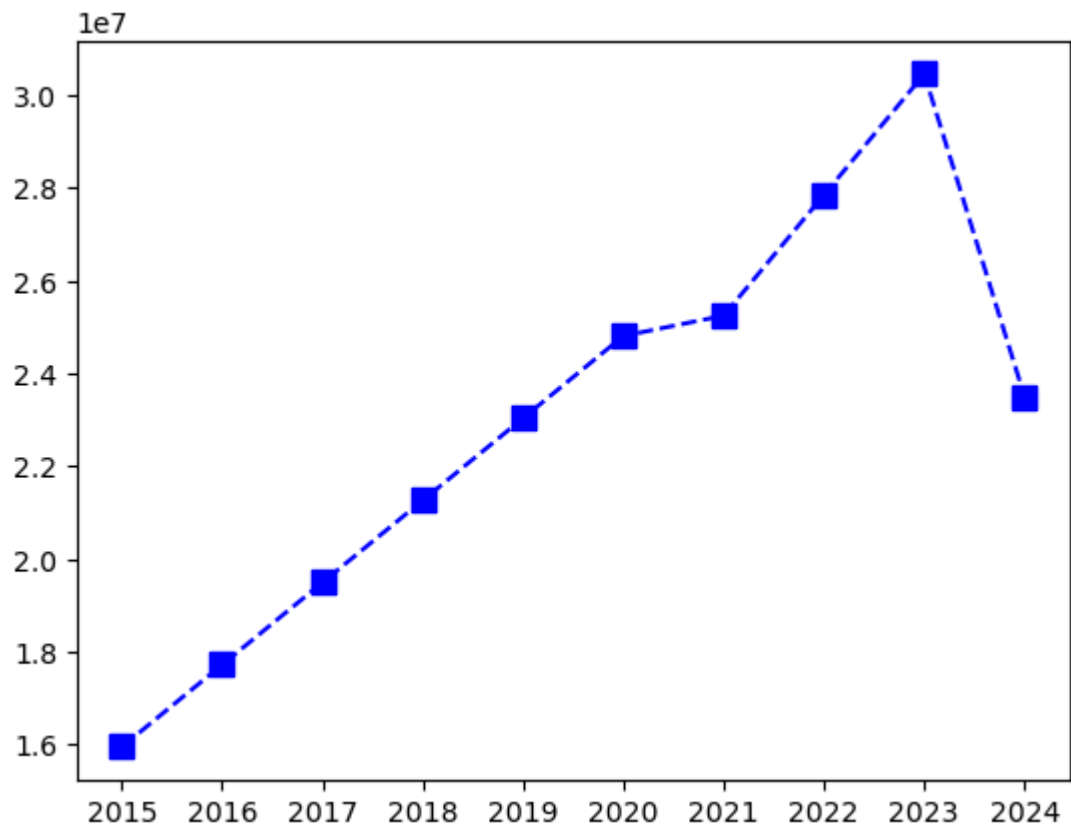
```
In [26]: Pdict
```

```
Out[26]: {'Sachin': 0,
          'Rahul': 1,
          'Smith': 2,
          'Sami': 3,
          'Pollard': 4,
          'Morris': 5,
          'Samson': 6,
          'Dhoni': 7,
          'Kohli': 8,
          'Sky': 9}
```

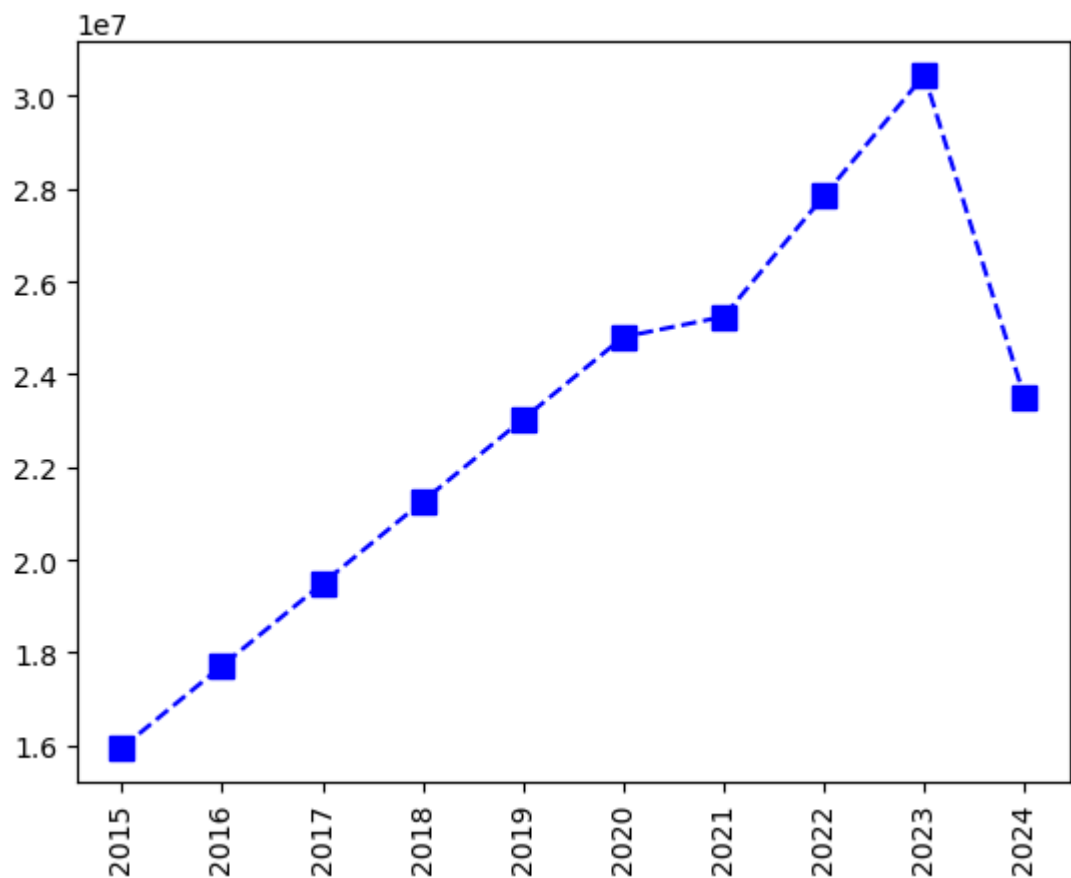
```
In [27]: plt.plot(Salary[0],c='blue',ls = '--',marker = 's',ms=8)
plt.xticks(list(range(0,10)),Seasons)
plt.show()
```



```
In [28]: plt.plot(Salary[0],c='blue',ls = '--',marker = 's',ms=8)
plt.xticks(list(range(0,10)),Seasons)
plt.show()
```



```
In [29]: plt.plot(Salary[0],c='blue',ls = '--',marker = 's',ms=8)
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
plt.show()
```



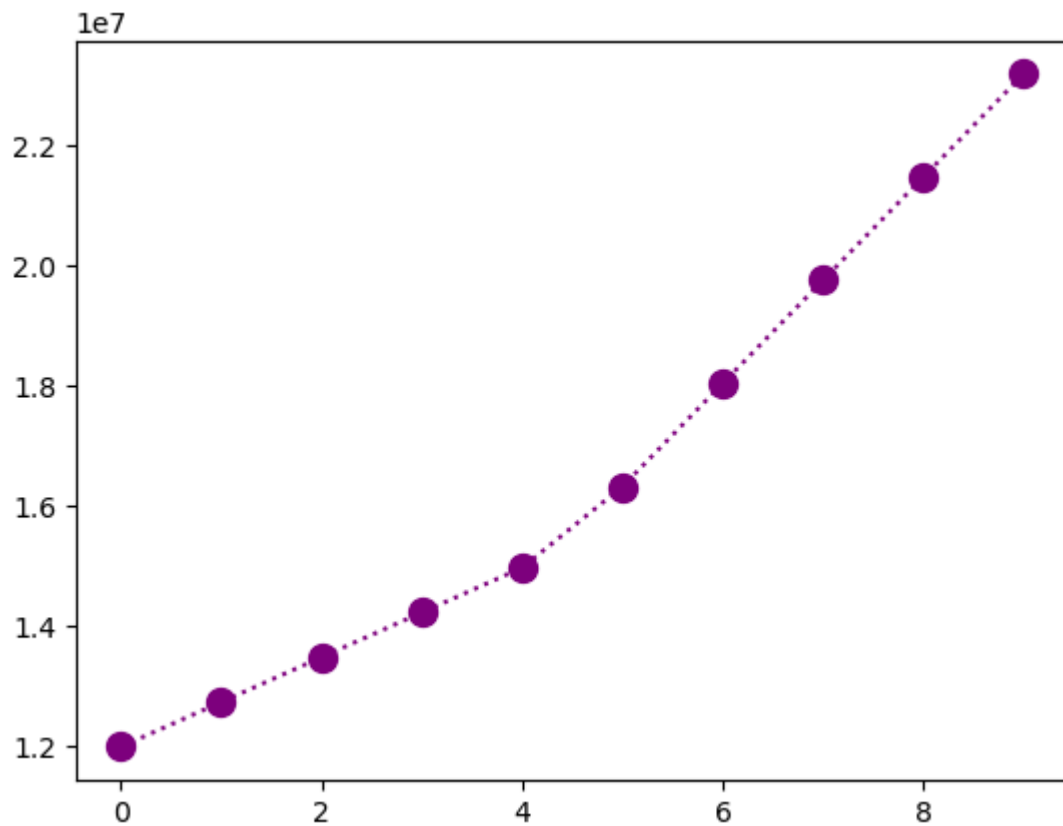
```
In [30]: Salary[1]
```



```
Out[30]: array([12000000, 12744189, 13488377, 14232567, 14976754, 16324500,  
              18038573, 19752645, 21466718, 23180790])
```

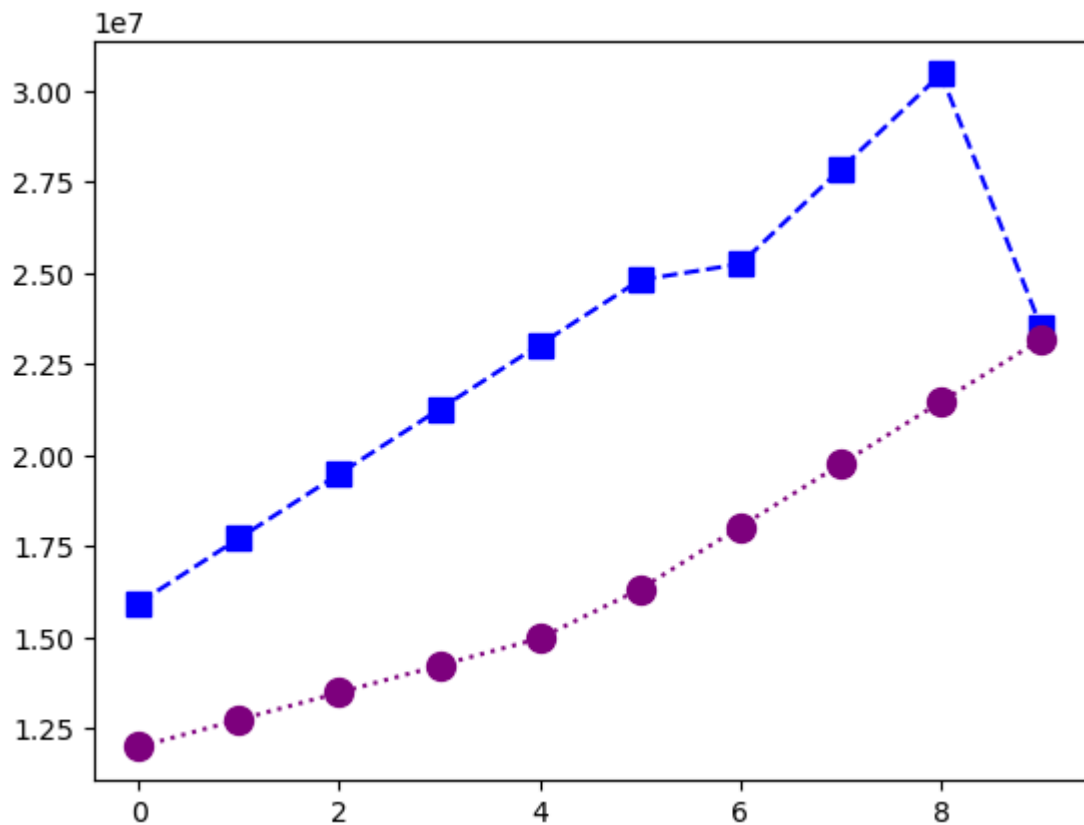
```
In [31]: plt.plot(Salary[1],c='purple',ls=':',marker='o',ms=10)
```

```
Out[31]: [<matplotlib.lines.Line2D at 0x2c3539c2ad0>]
```



```
In [32]: plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=8)  
plt.plot(Salary[1],c='purple',ls=':',marker='o',ms=10)
```

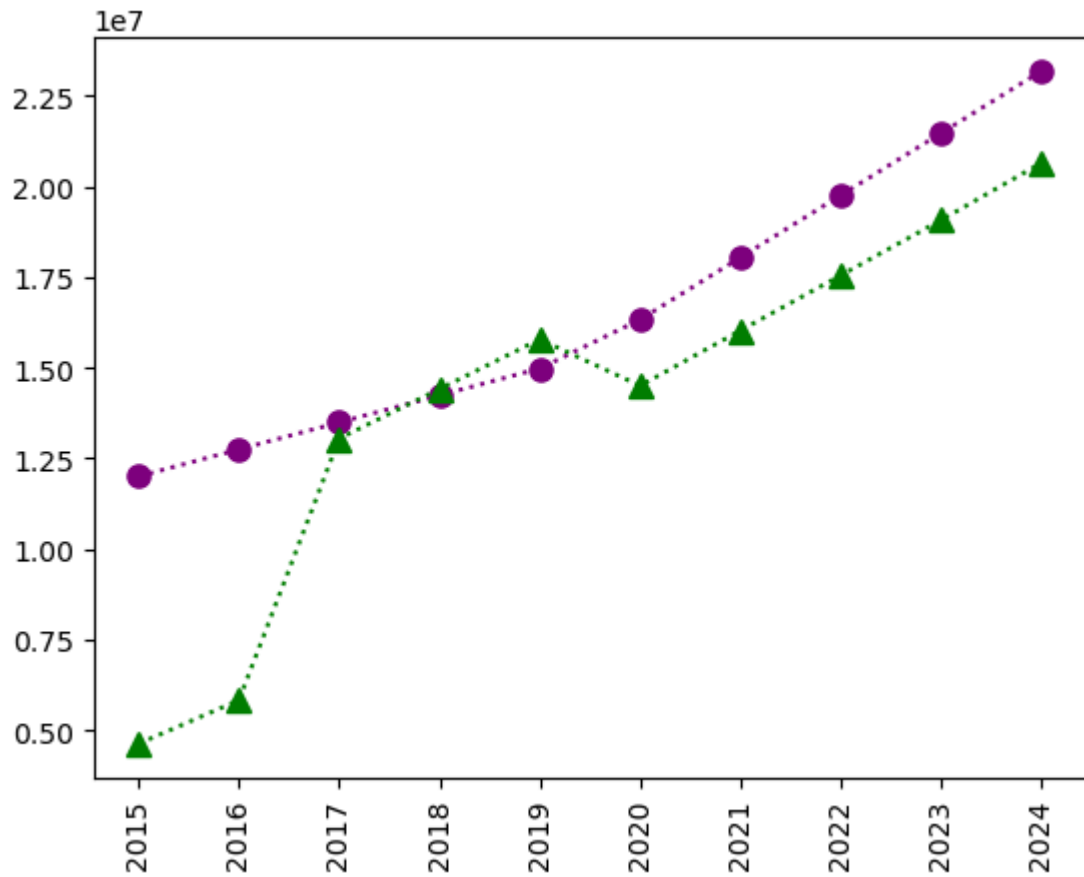
```
Out[32]: [<matplotlib.lines.Line2D at 0x2c354b94550>]
```



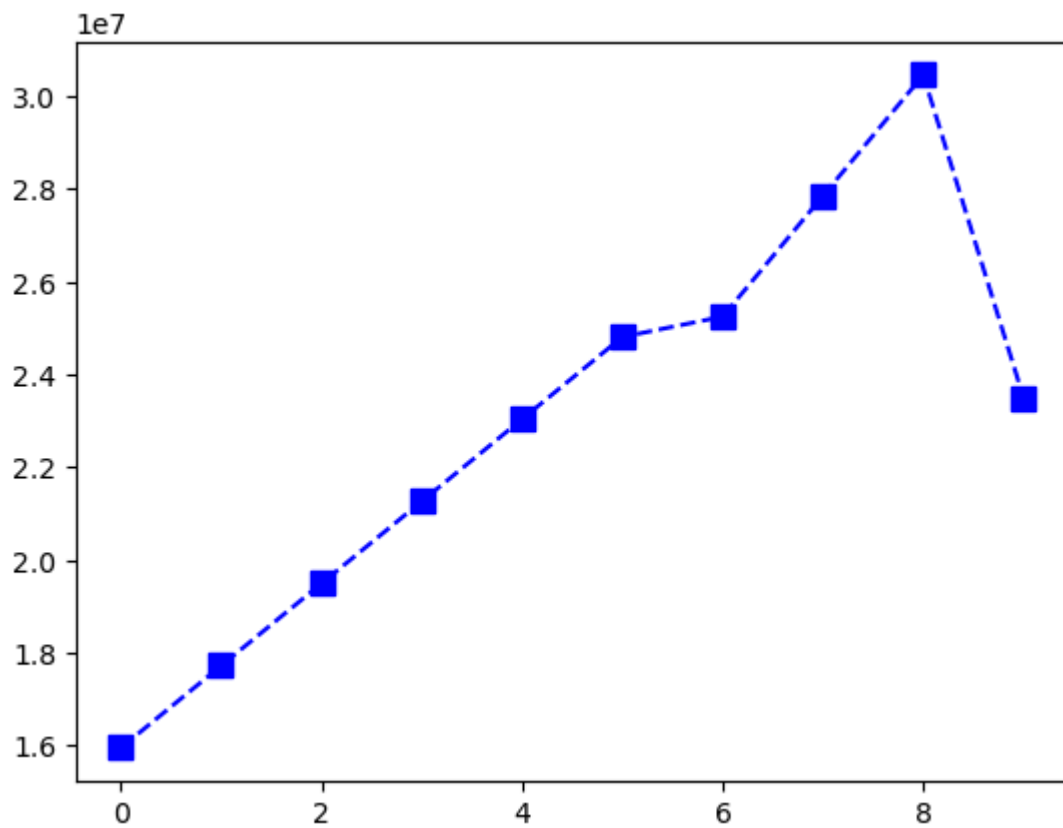
In [33]: Games

```
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]: plt.plot(Salary[1],c='purple',ls=':',marker='o',ms=8)
plt.plot(Salary[2],c='green',ls=':',marker='^',ms=8)
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
plt.show()
plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=8)
```

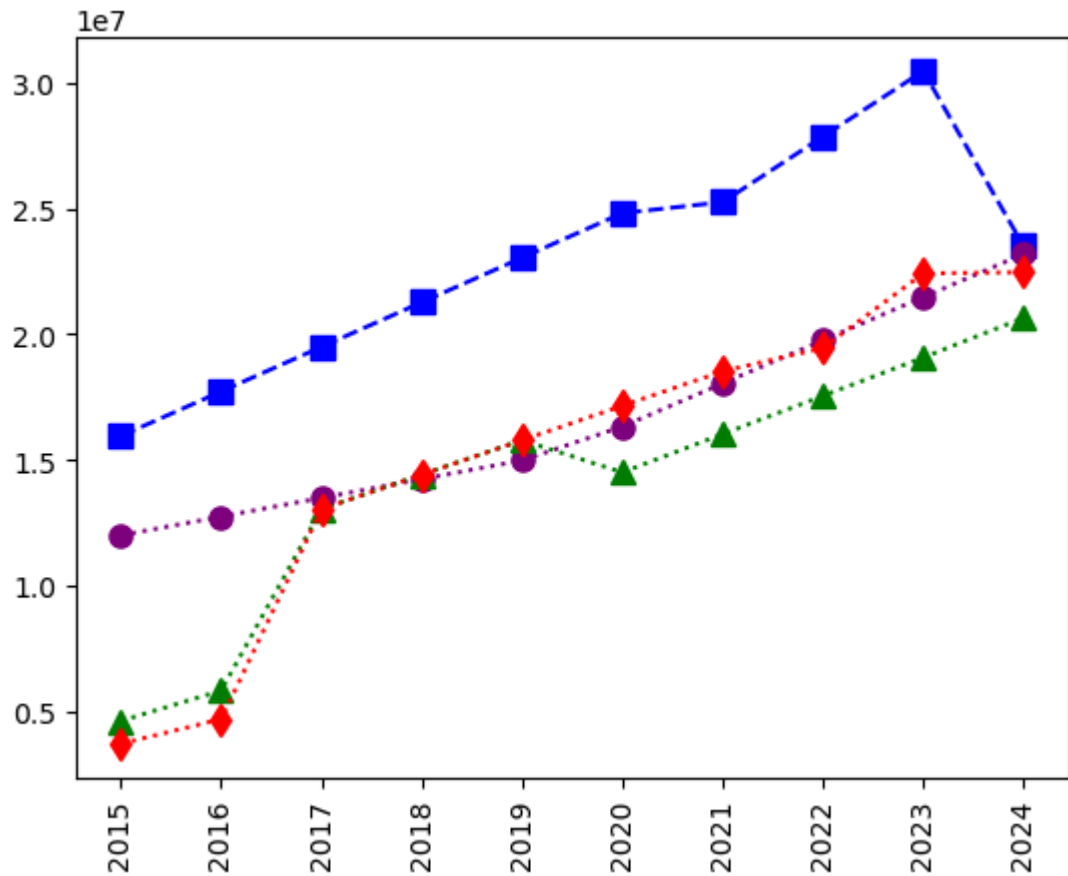


Out[34]: [`<matplotlib.lines.Line2D at 0x2c354c7a990>`]

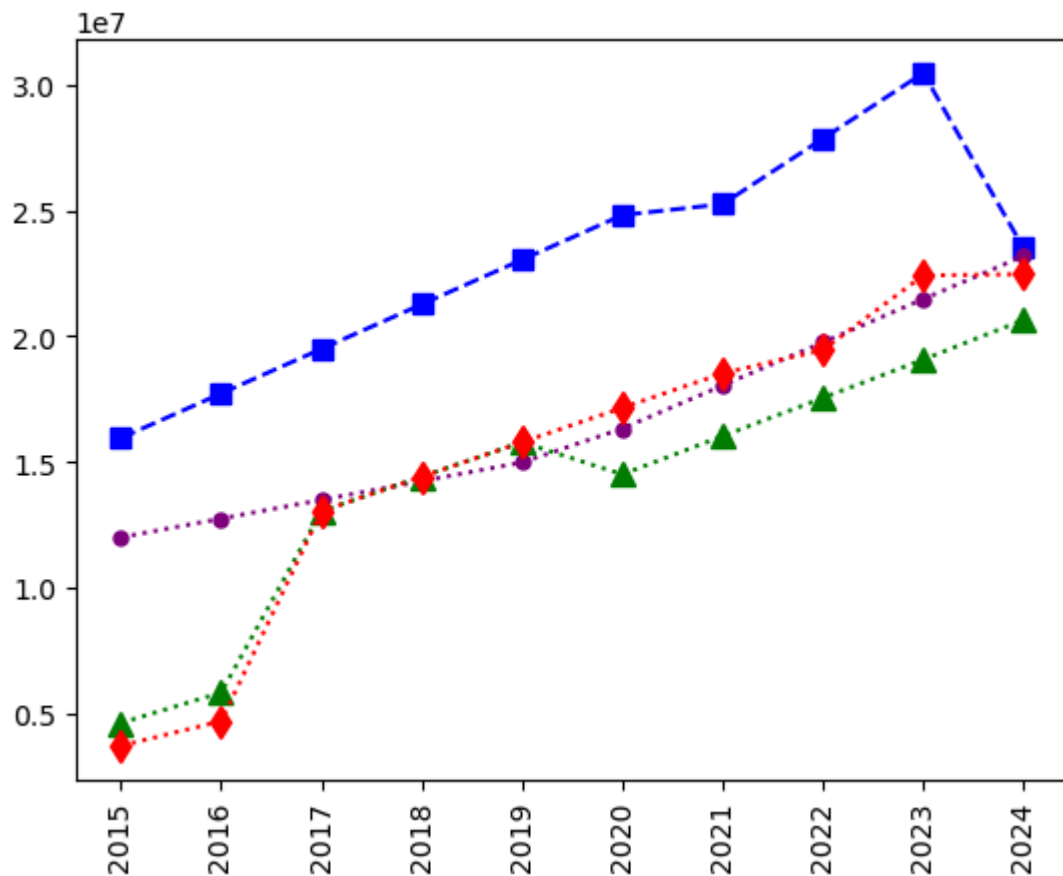


```
In [35]: plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=8)
plt.plot(Salary[1],c='purple',ls=':',marker='o',ms=8)
plt.plot(Salary[2],c='green',ls=':',marker='^',ms=8)
plt.plot(Salary[3],c='red',ls=':',marker='d',ms=8)
```

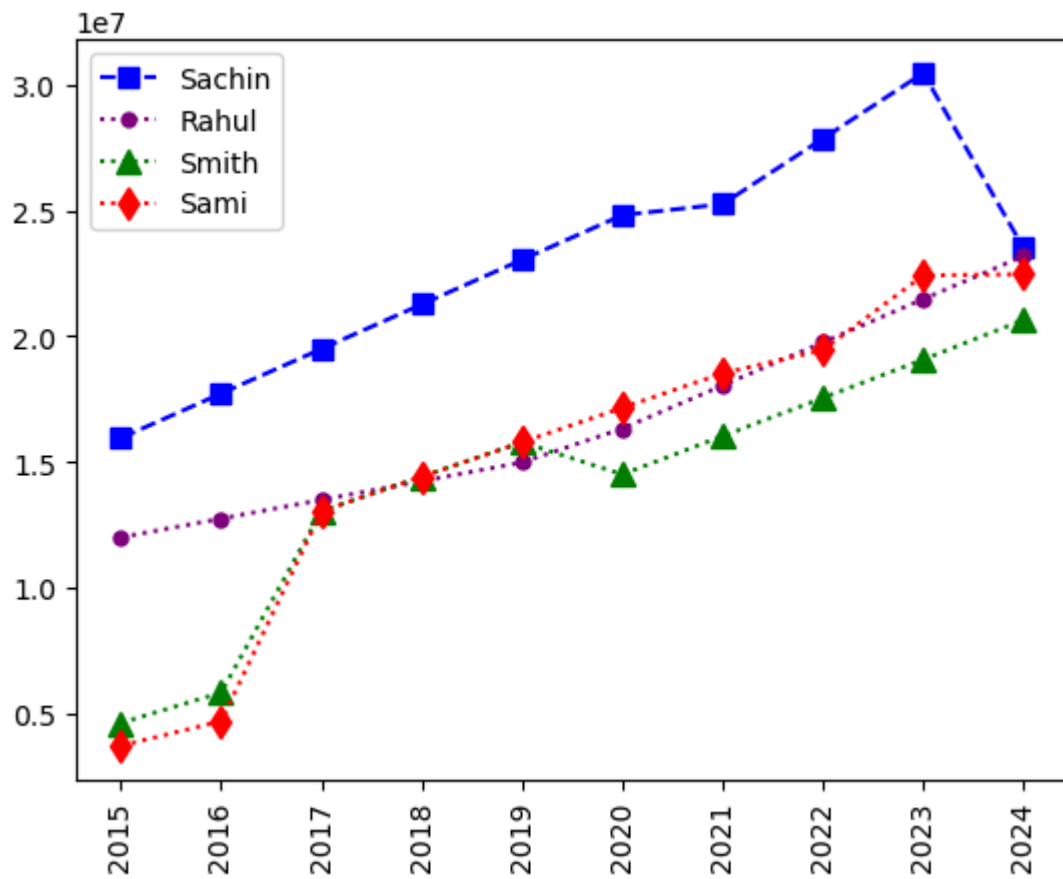
```
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
plt.show()
```



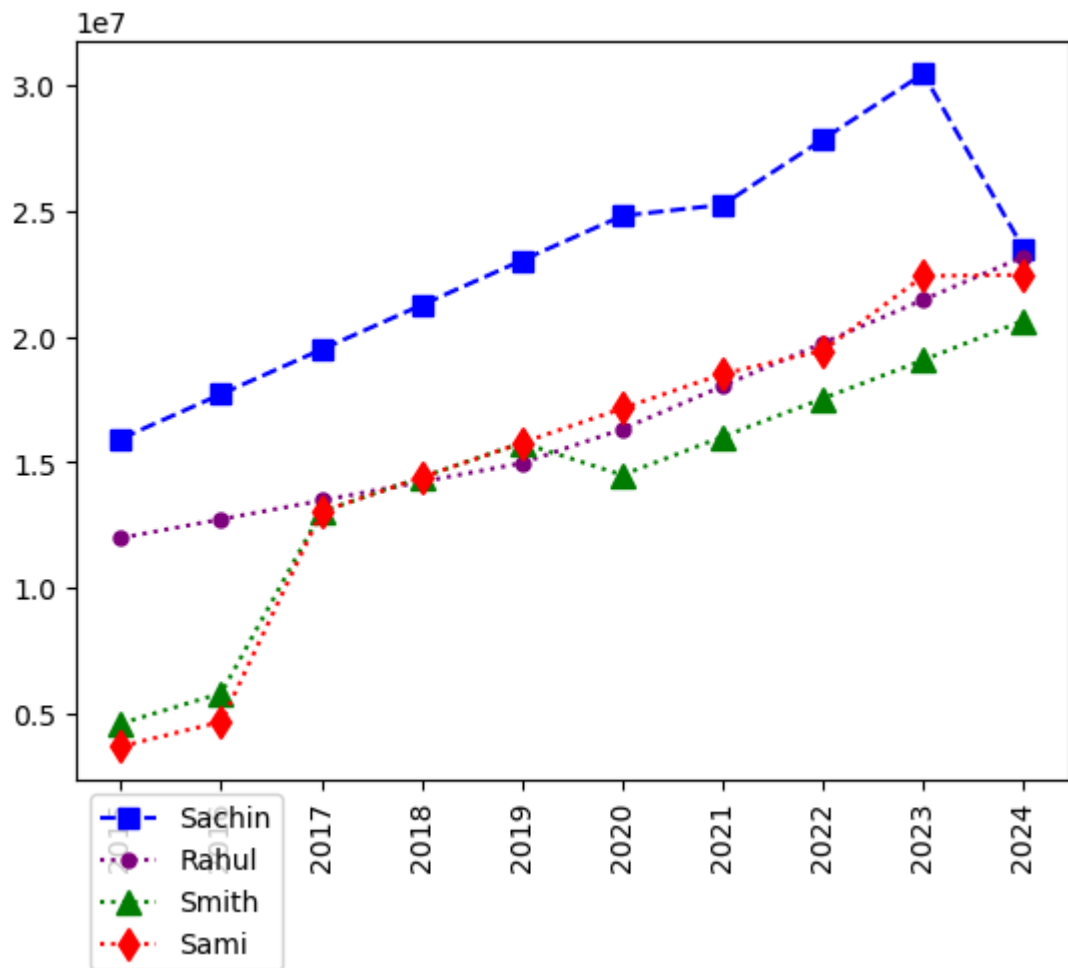
```
In [36]: plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=7,label=Players[0])
plt.plot(Salary[1],c='purple',ls=':',marker='o',ms=5,label=Players[1])
plt.plot(Salary[2],c='green',ls=':',marker='^',ms=8,label=Players[2])
plt.plot(Salary[3],c='red',ls=':',marker='d',ms=8,label=Players[3])
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
plt.show()
```



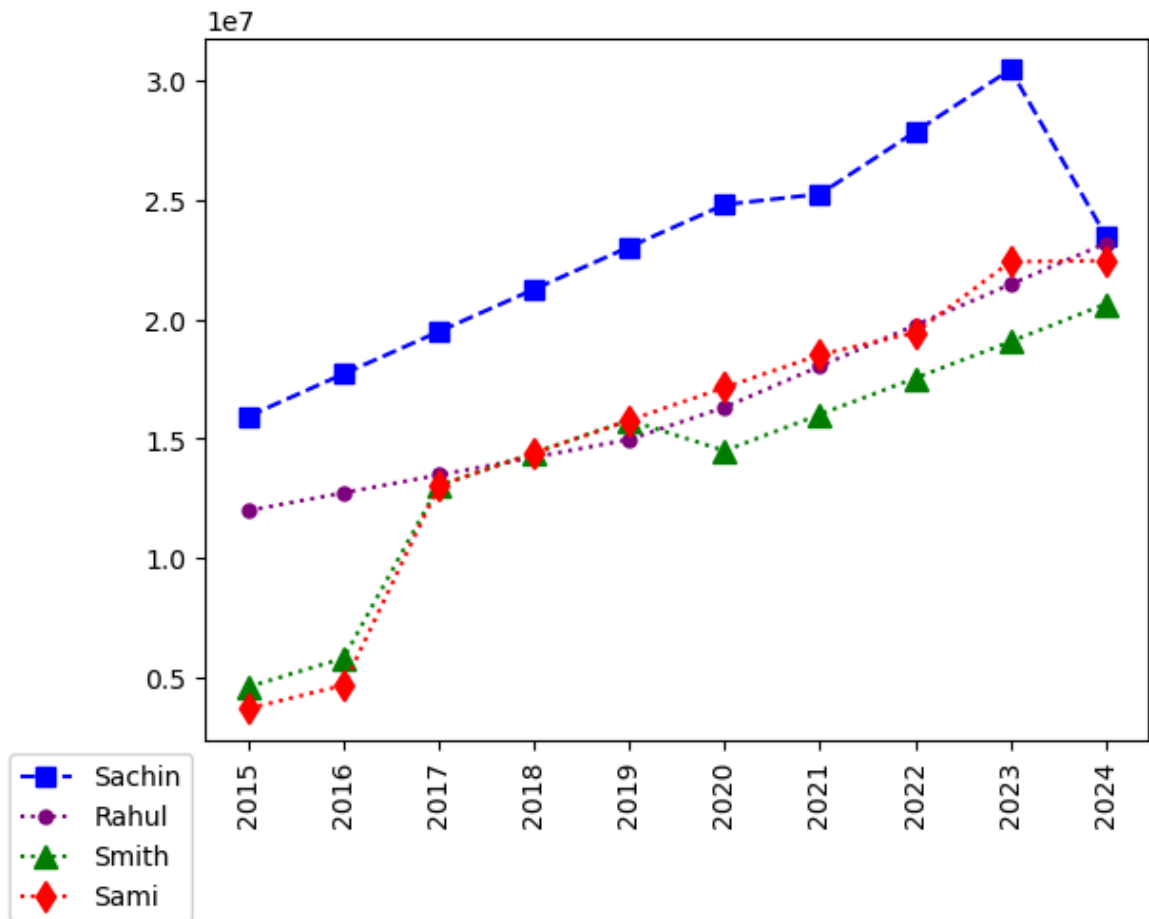
```
In [37]: # How to add legend in visualisation
plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=7,label=Players[0])
plt.plot(Salary[1],c='purple',ls=':',marker='o',ms=5,label=Players[1])
plt.plot(Salary[2],c='green',ls=':',marker='^',ms=8,label=Players[2])
plt.plot(Salary[3],c='red',ls=':',marker='d',ms=8,label=Players[3])
plt.legend()
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
plt.show()
```



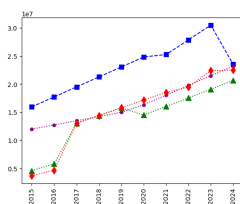
```
In [38]: plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=7,label=Players[0])
plt.plot(Salary[1],c='purple',ls=':',marker='o',ms=5,label=Players[1])
plt.plot(Salary[2],c='green',ls=':',marker='^',ms=8,label=Players[2])
plt.plot(Salary[3],c='red',ls=':',marker='d',ms=8,label=Players[3])
plt.legend(loc = 'upper left',bbox_to_anchor=(0,0))
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
plt.show()
```



```
In [39]: plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=7,label=Players[0])
plt.plot(Salary[1],c='purple',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=(0,0))
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
plt.show()
```

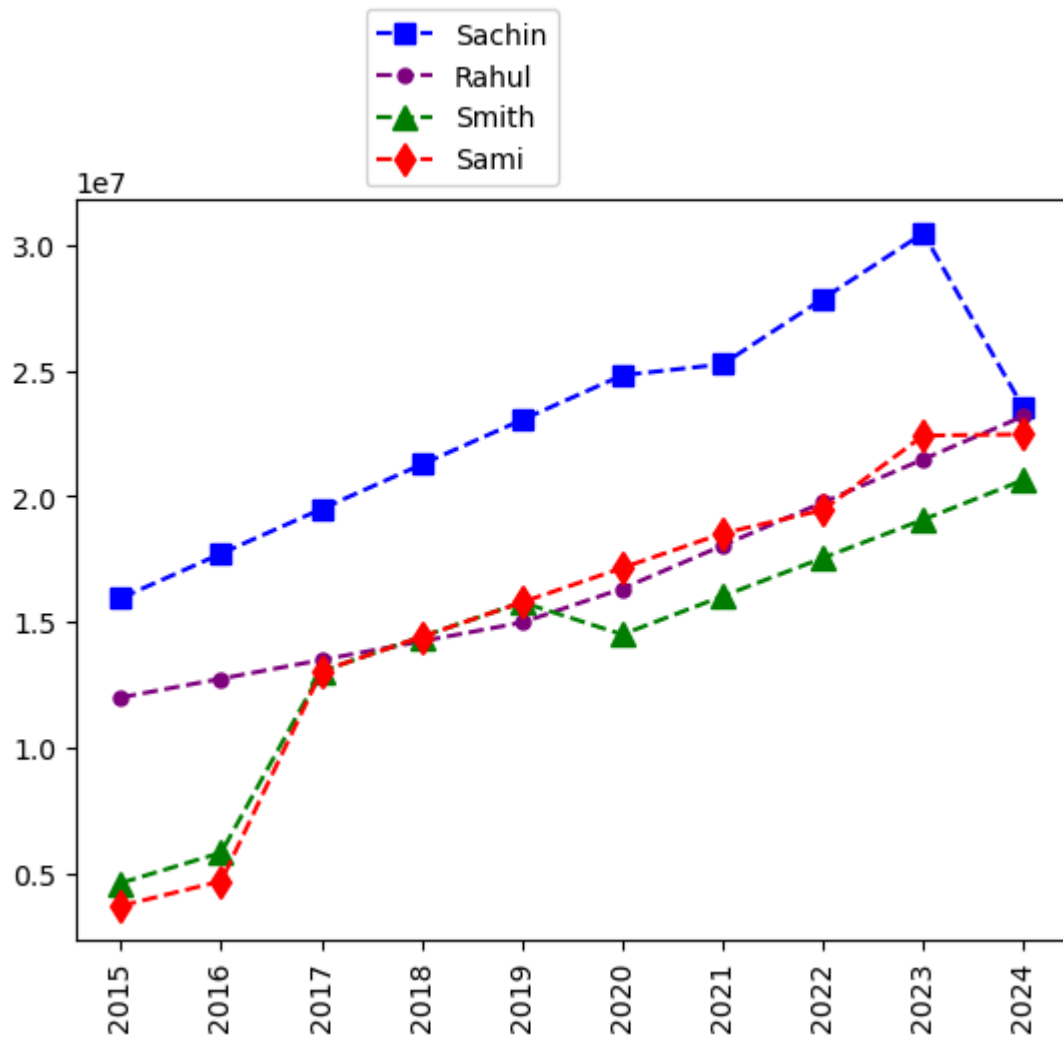


```
In [42]: plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=7,label=Players[0])
plt.plot(Salary[1],c='purple',ls=':',marker='o',ms=5,label=Players[1])
plt.plot(Salary[2],c='green',ls=':',marker='^',ms=8,label=Players[2])
plt.plot(Salary[3],c='red',ls=':',marker='d',ms=8,label=Players[3])
plt.legend(loc = 'lower left',bbox_to_anchor=(5.0,1))
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
plt.show()
```



```
In [44]: plt.plot(Salary[0],c='blue',ls='--',marker='s',ms=7,label=Players[0])
plt.plot(Salary[1],c='purple',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()
```





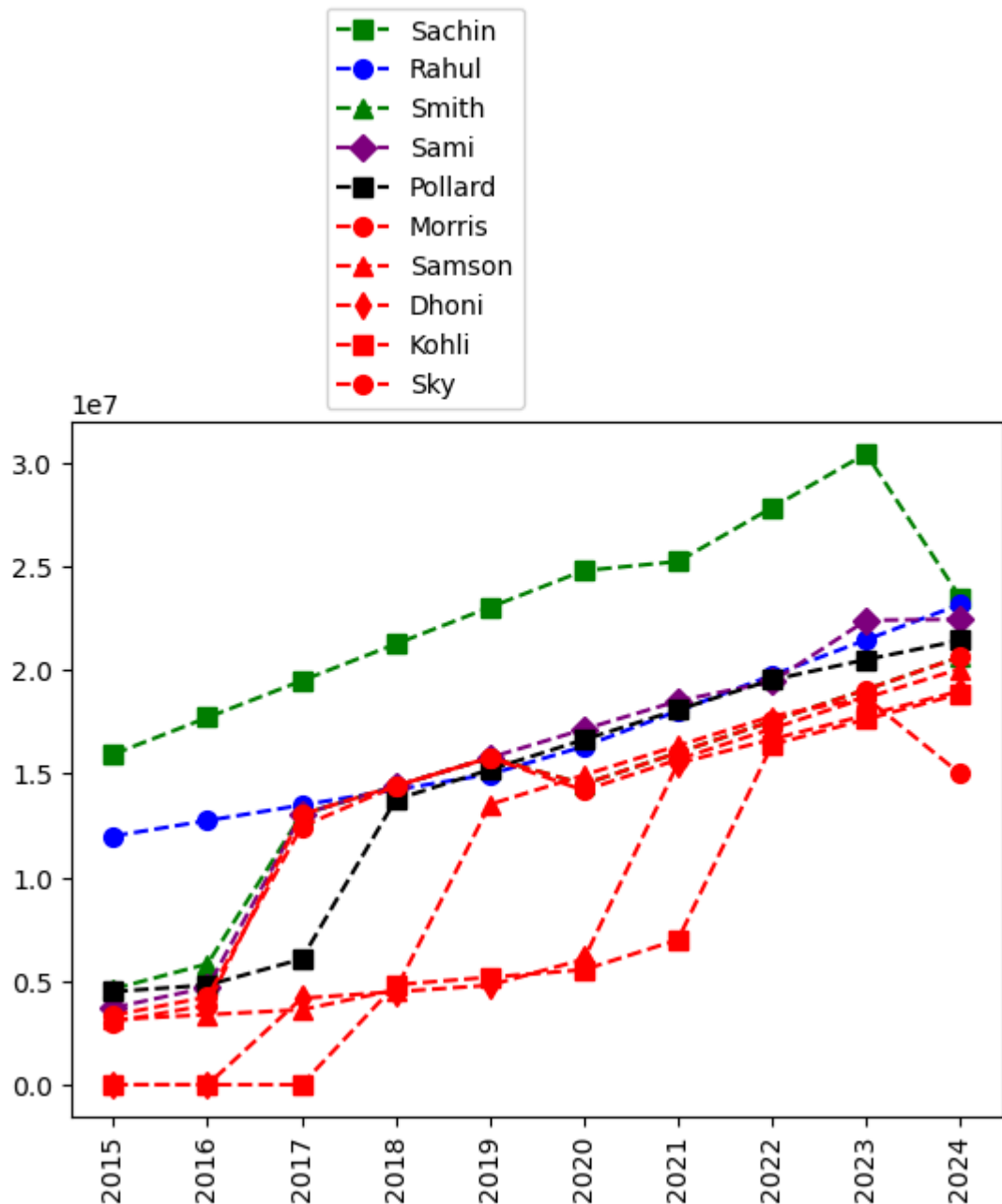
```
In [47]: plt.plot(Salary[0], c='Green',ls = '--', marker = 's',ms = 7, label = Players[0])
plt.plot(Salary[1], c='Blue',ls = '--', marker = 'o',ms = 7, label = Players[1])
plt.plot(Salary[2], c='Green',ls = '--', marker = '^',ms = 7, label = Players[2])
plt.plot(Salary[3], c='Purple',ls = '--', marker = '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 = 'lower right',bbox_to_anchor=(0.5,1))
plt.xticks(list(range(0,10)),Seasons,rotation='vertical')
```

```

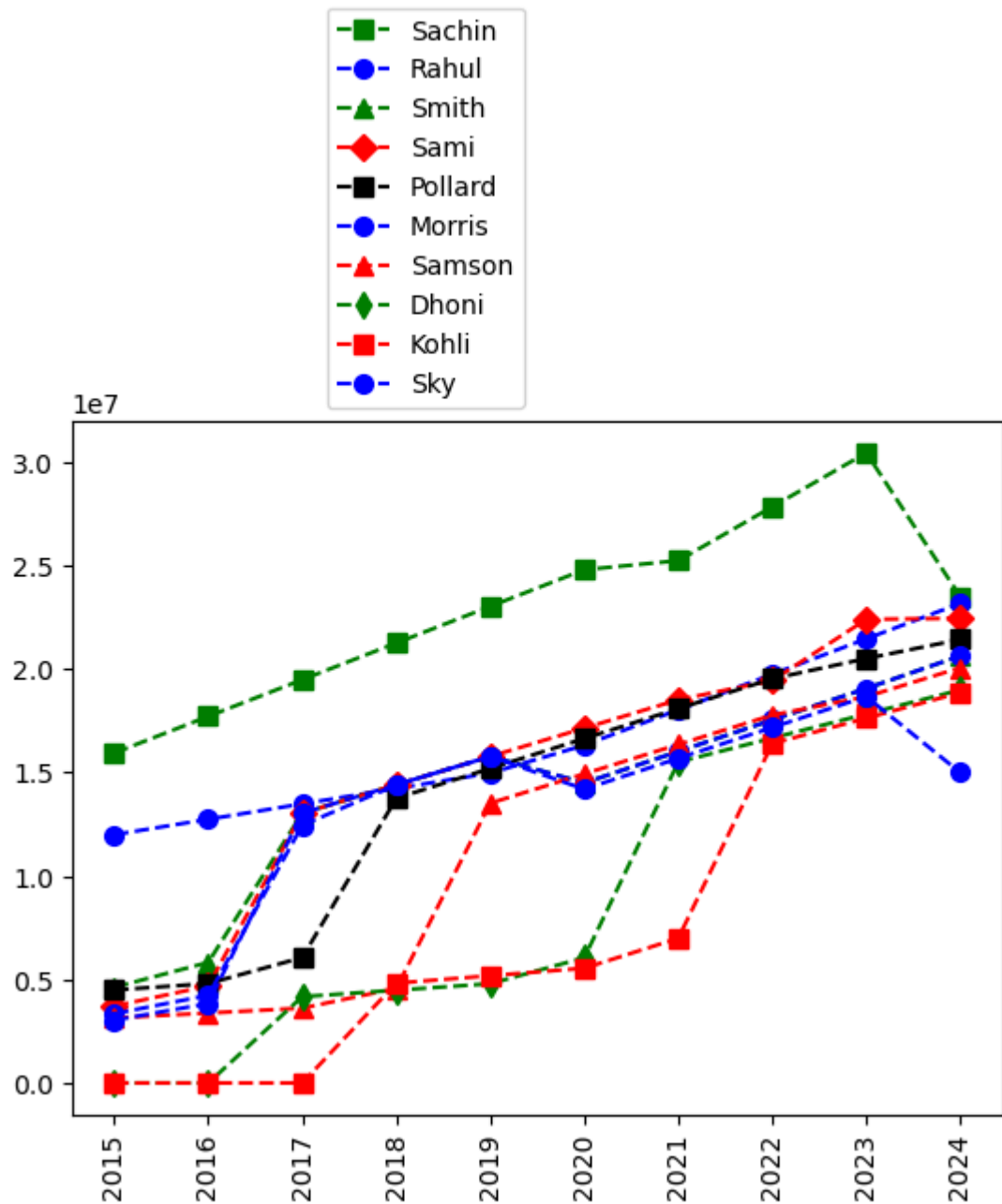
Out[47]: ([<matplotlib.axis.XTick at 0x2c356e91f90>,
<matplotlib.axis.XTick at 0x2c356efd6d0>,
<matplotlib.axis.XTick at 0x2c356efde50>,
<matplotlib.axis.XTick at 0x2c356efe5d0>,
<matplotlib.axis.XTick at 0x2c356efed50>,
<matplotlib.axis.XTick at 0x2c356eff4d0>,
<matplotlib.axis.XTick at 0x2c356effc50>,
<matplotlib.axis.XTick at 0x2c356f20410>,
<matplotlib.axis.XTick at 0x2c356f20b90>,
<matplotlib.axis.XTick at 0x2c356f21310>],
[Text(0, 0, '2015'),
Text(1, 0, '2016'),
Text(2, 0, '2017'),
Text(3, 0, '2018'),
Text(4, 0, '2019'),
Text(5, 0, '2020'),
Text(6, 0, '2021'),
Text(7, 0, '2022'),
Text(8, 0, '2023'),
Text(9, 0, '2024')])

```



```
In [48]: 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='Red',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='Blue',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='Green',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='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')
```

```
Out[48]: ([<matplotlib.axis.XTick at 0x2c356f3e710>,
<matplotlib.axis.XTick at 0x2c356fc5e50>,
<matplotlib.axis.XTick at 0x2c356fc65d0>,
<matplotlib.axis.XTick at 0x2c356fc6d50>,
<matplotlib.axis.XTick at 0x2c356fc74d0>,
<matplotlib.axis.XTick at 0x2c356fc7c50>,
<matplotlib.axis.XTick at 0x2c356fe8410>,
<matplotlib.axis.XTick at 0x2c356fe8b90>,
<matplotlib.axis.XTick at 0x2c356fe9310>,
<matplotlib.axis.XTick at 0x2c356fe9a90>],
[Text(0, 0, '2015'),
Text(1, 0, '2016'),
Text(2, 0, '2017'),
Text(3, 0, '2018'),
Text(4, 0, '2019'),
Text(5, 0, '2020'),
Text(6, 0, '2021'),
Text(7, 0, '2022'),
Text(8, 0, '2023'),
Text(9, 0, '2024')])
```



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