

project

In [33]:

```
#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, "2023":8, "2024":9}

#Players
Players = ["Sachin", "Rahul", "Smith", "Sami", "Pollard", "Morris", "Samson", "Dhoni", "Kohli", "Sky"]
Pdict = {"Sachin":0, "Rahul":1, "Smith":2, "Sami":3, "Pollard":4, "Morris":5, "Samson":6, "Dhoni":7, "Kohli":8, "Sky":9}

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

#Matrix
Salary = np.array([Sachin_Salary, Rahul_Salary, Smith_Salary, Sami_Salary, Pollard_Salary, Morris_Salary, Samson_Salary, Dhoni_Salary, Kohli_Salary, Sky_Salary])

#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, Dhoni_G, Kohli_G, Sky_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_PTS, Samson_PTS, Dhoni_PTS, Kohli_PTS, Sky_PTS])
```

In [35]:

Salary

Out[35]:

```
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 [39]:

Games

Out[39]:

```
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 [37]:

Points

Out[37]:

```
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 [41]:

Salary[0]

Out[41]:

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

In [45]:

Games[1:5]

Out[45]:

```
array([[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 [47]:

Games[1,5]

Out[47]:

72

In [49]:

Pdict

Out[49]:

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

In [51]:

Salary/Games

```
C:\Users\kavya\AppData\Local\Temp\ipykernel_14904\3709746658.py:1: RuntimeWarning: divide by zero encountered in divide
Salary/Games
```

Out[51]:

```
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 [53]:

```
np.round(Salary//Games)
```

```
C:\Users\kavya\AppData\Local\Temp\ipykernel_14904\3663165759.py:1: RuntimeWarning: divide by zero encountered in floor_divide
np.round(Salary//Games)
```

```
Out[53]:
```

```
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 [55]:
```

```
import warnings
warnings.filterwarnings('ignore')
```

```
In [57]:
```

```
import numpy as np
import matplotlib.pyplot as plt
```

```
In [59]:
```

```
Salary[0]
```

```
Out[59]:
```

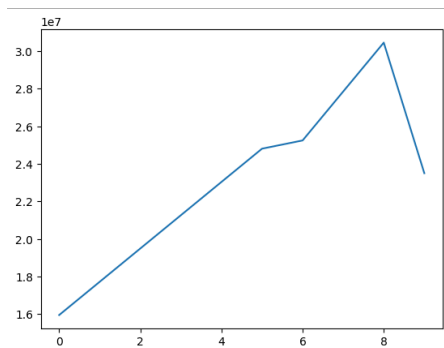
```
array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
       25244493, 27849149, 30453805, 23500000])
```

```
In [61]:
```

```
plt.plot(Salary[0])
```

```
Out[61]:
```

```
[<matplotlib.lines.Line2D at 0x13161f42510>]
```

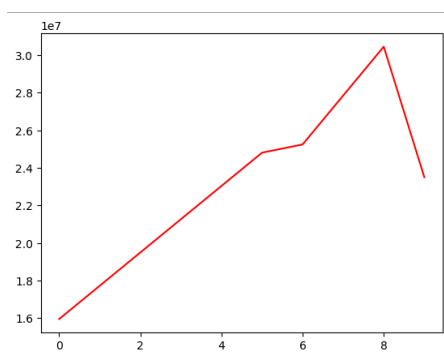


```
In [65]:
```

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

```
Out[65]:
```

```
[<matplotlib.lines.Line2D at 0x13162a718b0>]
```

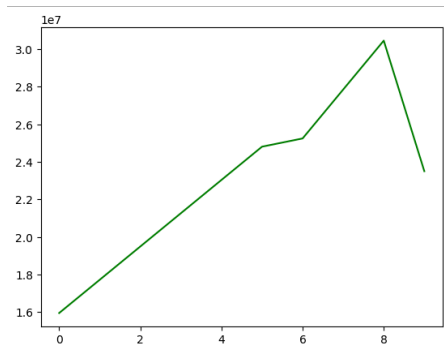


```
In [67]:
```

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

Out[67]:

[<matplotlib.lines.Line2D at 0x13162ab25d0>]

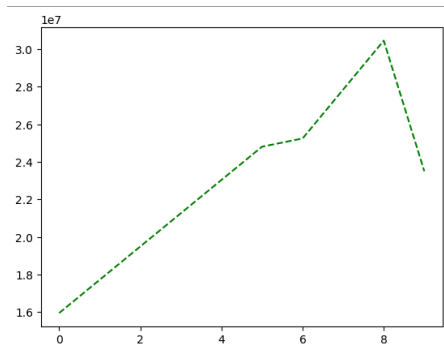


In [69]:

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

Out[69]:

[<matplotlib.lines.Line2D at 0x13162ada360>]

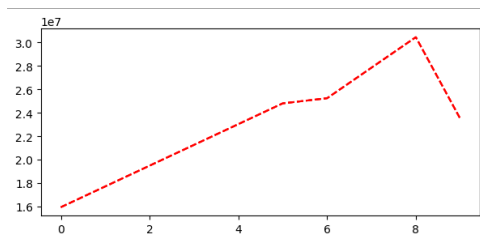


In [71]:

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

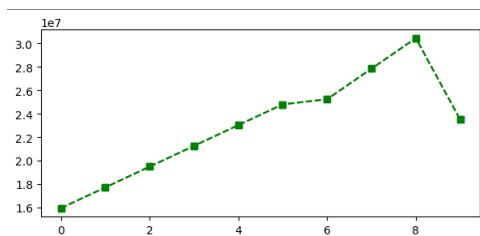
In [77]:

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



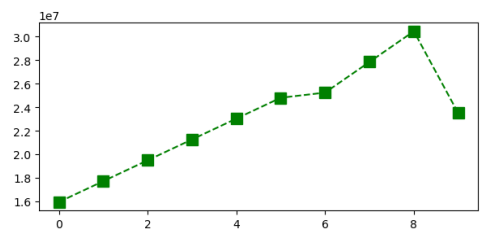
In [83]:

```
plt.plot(Salary[0], c='Green', ls = '--', marker = 's') # s - squares
plt.show()
```



In [85]:

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



In [99]:

```
list(range(0,10))
```

Out[99]:

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

In [101]:

```
Sdict
```

Out[101]:

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

In [103]:

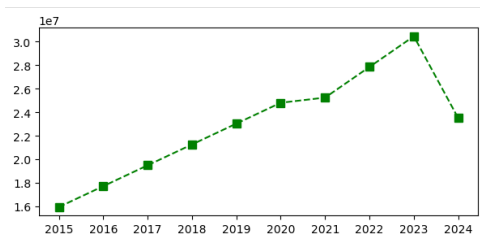
```
Pdict
```

Out[103]:

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

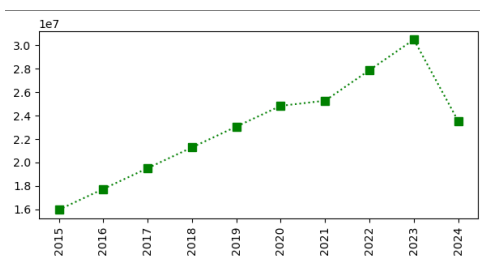
In [105]:

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



In [107]:

```
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 [109]:

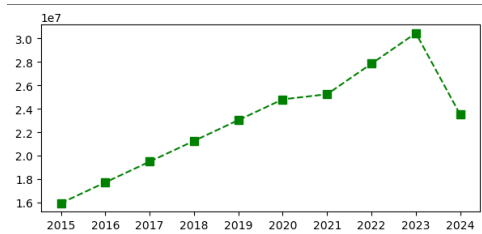
```
Games
```

Out[109]:

```
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 [111]:

```
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 [115]:

Salary[0]

Out[115]:

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

In [117]:

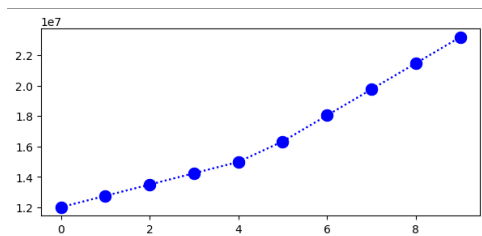
Salary[1]

Out[117]:

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

In [121]:

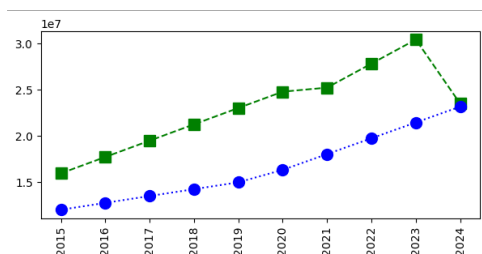
```
plt.plot(Salary[1], c='Blue', ls = ':', marker = 'o', ms = 10, label = Players[1])
plt.show()
```



In [123]:

```
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])

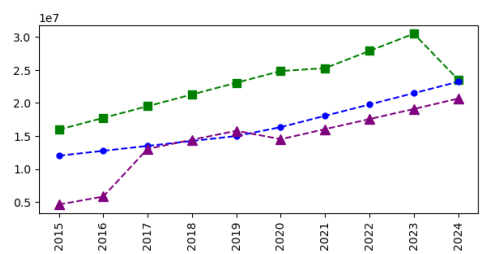
plt.xticks(list(range(0,10)), Seasons,rotation='vertical')
plt.show()
```



In [125]:

```
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()
```

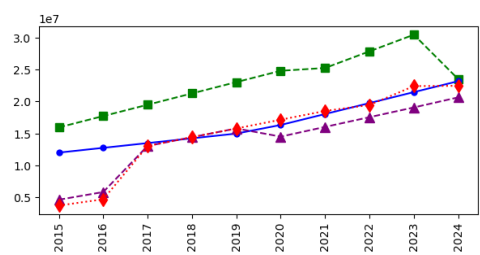


In [127]:

```
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')

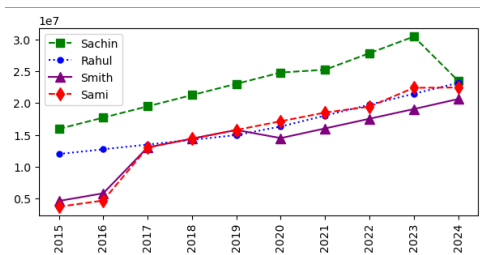
plt.show()
```



In [129]:

```
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')

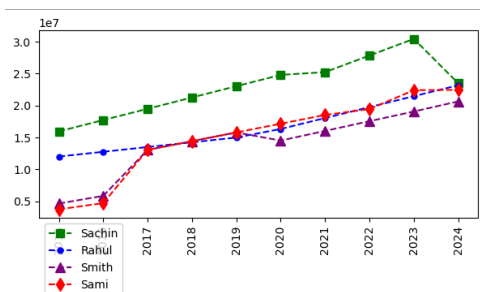
plt.show()
```



In [131]:

```
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')

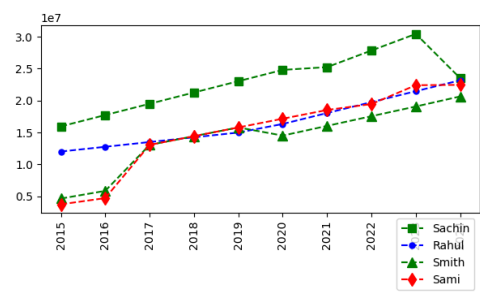
plt.show()
```



In [133]:

```
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')

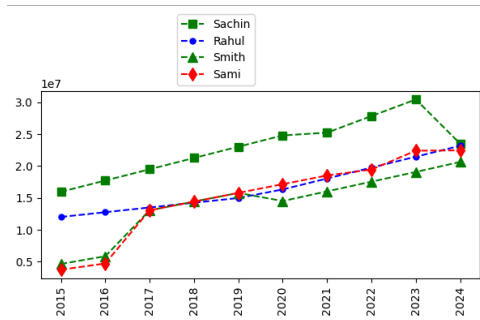
plt.show()
```



In [135]:

```
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 [141]:

```
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')

plt.show()
```



```

-----
ValueError                                Traceback (most recent call last)
Cell In[141], line 12
      9 plt.plot(Salary[8], c='Red', ls = '--', marker = 's', ms = 7, label = Players[8])
     10 plt.plot(Salary[9], c='Red', ls = '--', marker = 'o', ms = 7, label = Players[9])
--> 12 plt.legend(loc = 'lower right',bbox_to_anchor=(0.5,1) )
     13 plt.xticks(list(range(0,10)), Seasons,rotation='vertical')
     15 plt.show()

File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3588, in legend(*args, **kwargs)
    3586 @_copy_docstring_and_deprecators(Axes.legend)
    3587 def legend(*args, **kwargs) -> Legend:
-> 3588     return gca().legend(*args, **kwargs)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:342, in Axes.legend(self, *args, **kwargs)
    225 """
    226 Place a legend on the Axes.
    227
    (...)
    339 .. plot:: gallery/text_labels_and_annotations/legend.py
    340 """
    341 handles, labels, kwargs = mlegend._parse_legend_args([self], *args, **kwargs)
-> 342 self.legend_ = mlegend.Legend(self, handles, labels, **kwargs)
    343 self.legend_.remove_method = self._remove_legend
    344 return self.legend_

File ~\anaconda3\Lib\site-packages\matplotlib\legend.py:566, in Legend.__init__(self, parent, handles, labels, loc, numpoints, markerfirst, reverse, scatterpoints, scatteryoffsets, prop, fontsize, labelcolor, borderpad, labelspacing, handlelength, handleheight, handletextpad, borderaxespad, columnspacing, ncols, mode, fancybox, shadow, title, title_fontsize, framealpha, edgecolor, facecolor, bbox_to_anchor, bbox_transform, frameon, handler_map, title_fontproperties, alignment, ncol, draggable)
    563 self._init_legend_box(handles, labels, markerfirst)
    565 # Set legend location
-> 566 self.set_loc(loc)
    568 # figure out title font properties:
    569 if title_fontsize is not None and title_fontproperties is not None:

File ~\anaconda3\Lib\site-packages\matplotlib\legend.py:684, in Legend.set_loc(self, loc)
    682     loc = locs[0] + ' ' + locs[1]
    683     # check that loc is in acceptable strings
-> 684     loc = _api.check_getitem(self.codes, loc=loc)
    685     elif np.iterable(loc):
    686         # coerce iterable into tuple
    687         loc = tuple(loc)

File ~\anaconda3\Lib\site-packages\matplotlib\_api\_init_.py:183, in check_getitem(mapping, **kwargs)
    181     return mapping[v]
    182 except KeyError:
-> 183     raise ValueError(
    184         f"{'v'} is not a valid value for {'k'}; supported values are "
    185         f"{'', ' '.join(map(repr, mapping))}") from None

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

```

In [143]:

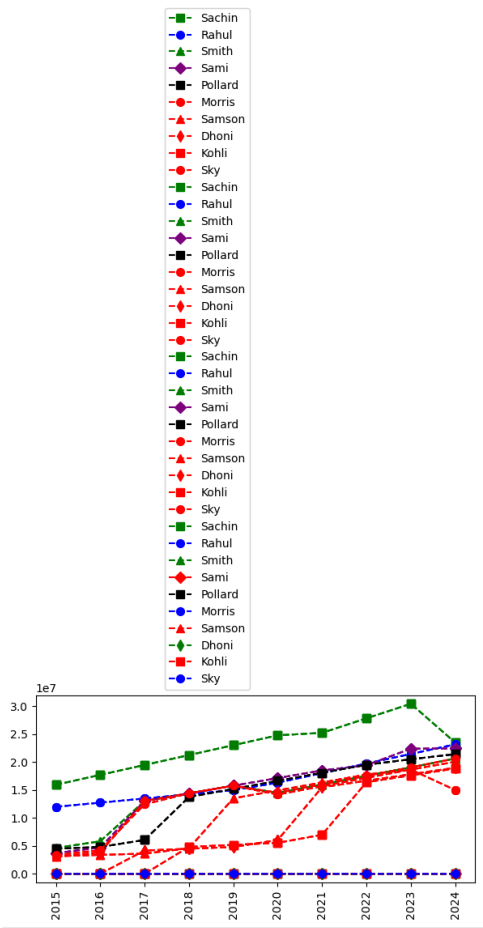
```

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()

```



In []: