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, 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 [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]:
```
Games
```

Out[5]:
```
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 [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]:
```
Games[0,6]
```

Out[8]:
```
58
```

In [9]:
```
print(Games[0,6])
```

```
58
```

In [10]:
```
Salary
```

Out[10]:
```
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 [11]:
```
Games
```

Out[11]:
```
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 [12]:
```
Salary / Games
```

```
C:\Users\DELL\AppData\Local\Temp\ipykernel_45256\1572766764.py:1: RuntimeWarning:
divide by zero encountered in divide
  Salary / Games
```

Out[12]:
```
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 [20]:
```
np.round(Salary//Games)
```

Out[20]:
```
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]])
```

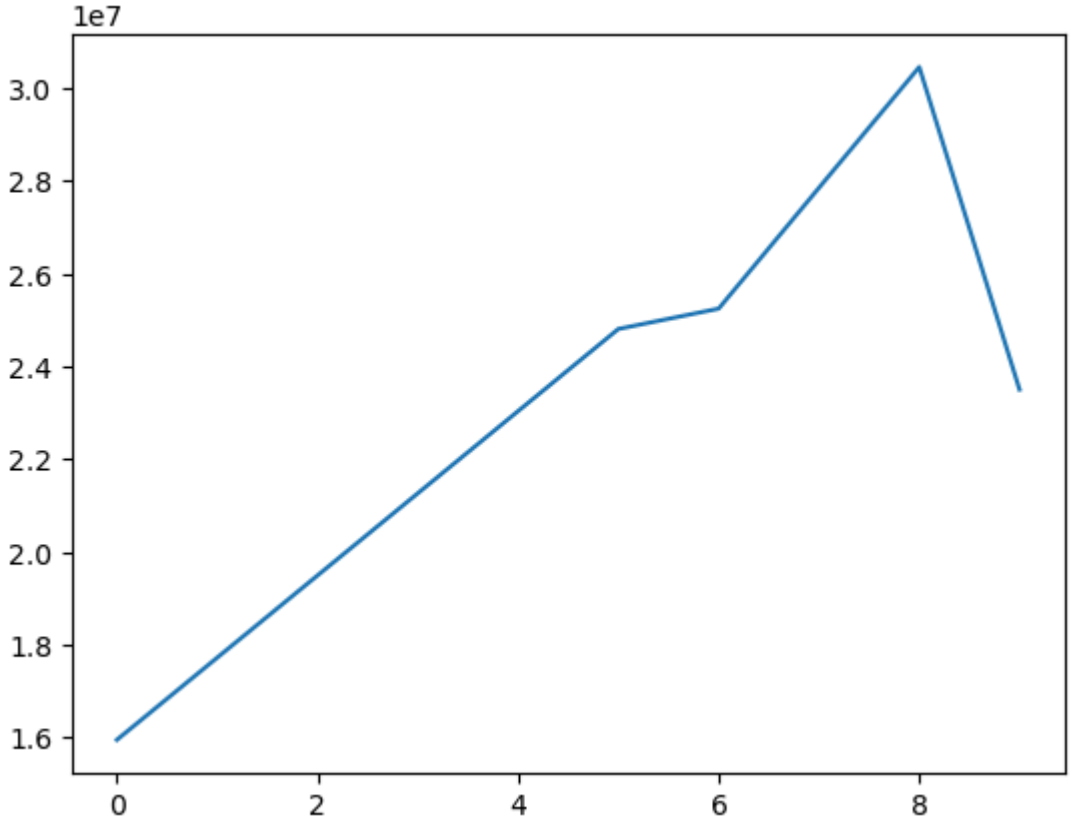
In [21]:
```
import warnings
warnings.filterwarnings('ignore')
```

In [22]:
```
import matplotlib.pyplot as plt
import numpy as np
```

In [23]:
```
Salary[0]
```

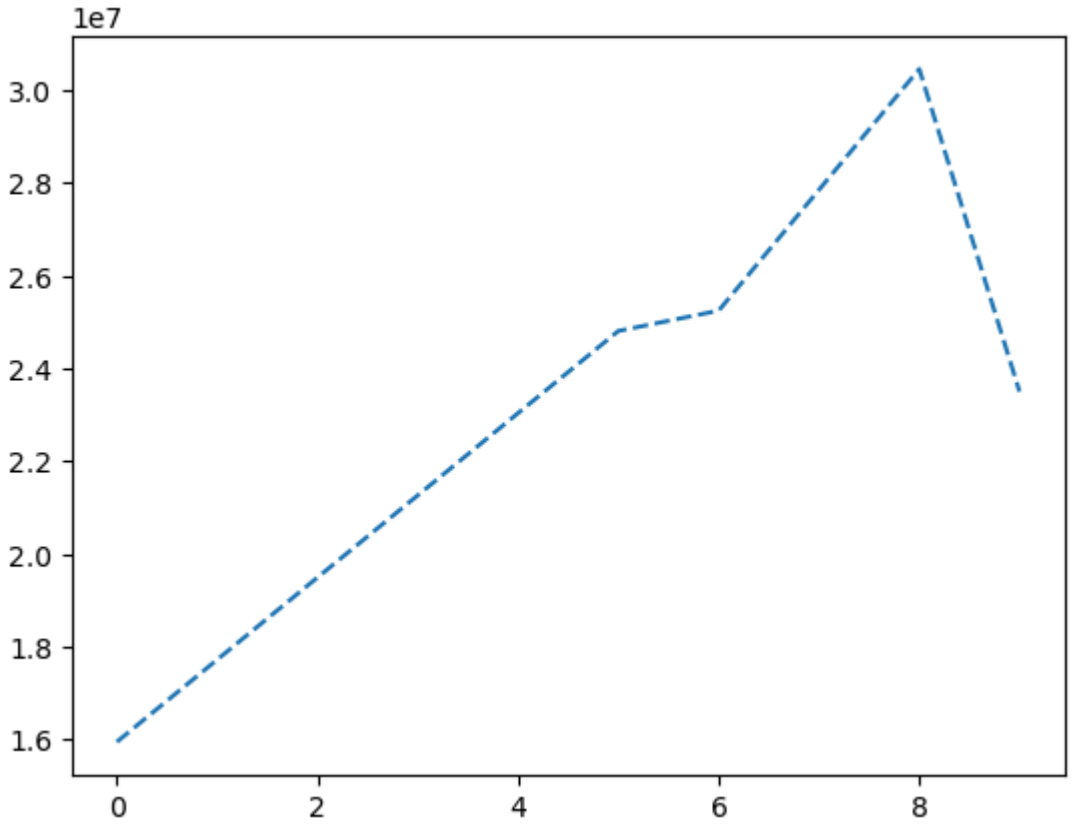
Out[23]:
```
array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
       25244493, 27849149, 30453805, 23500000])
```

In [24]:
```
plt.plot(Salary[0])
plt.show()
```



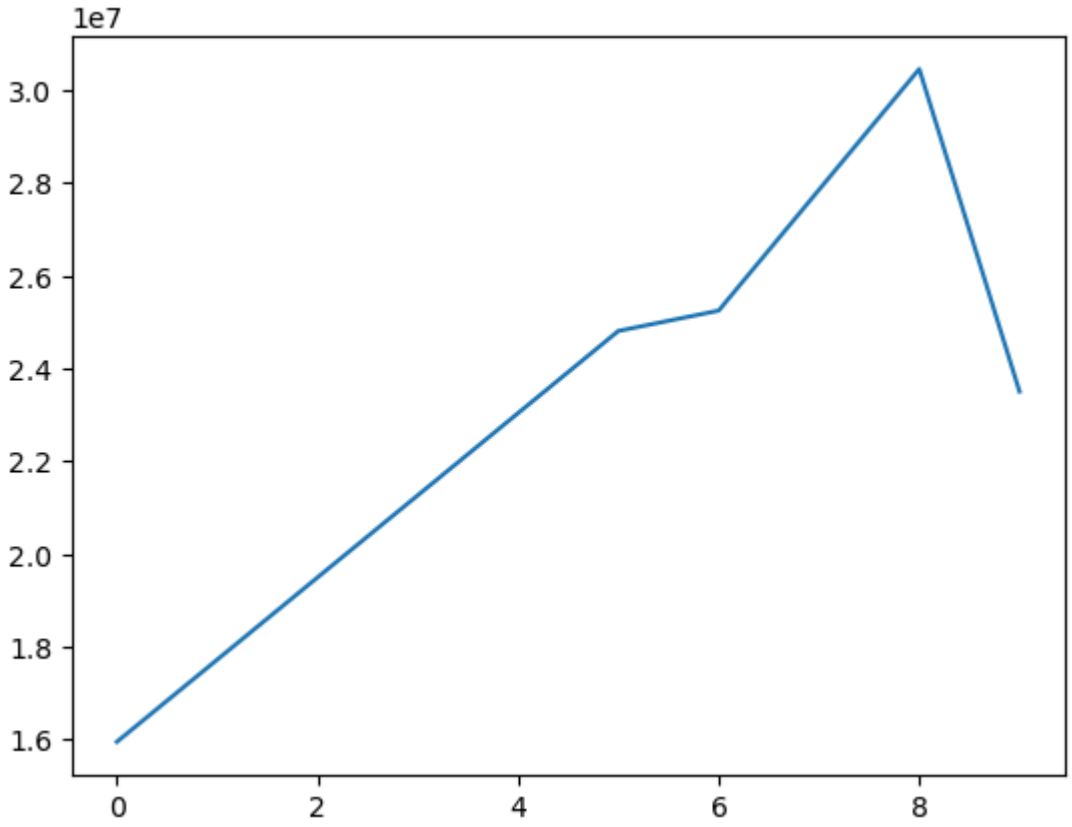
In [25]:
```
plt.plot(Salary[0], ls='--')
```

Out[25]:
```
[<matplotlib.lines.Line2D at 0x1ba47260a70>]
```



In [26]:
```
plt.plot(Salary[0], ls='-')
```

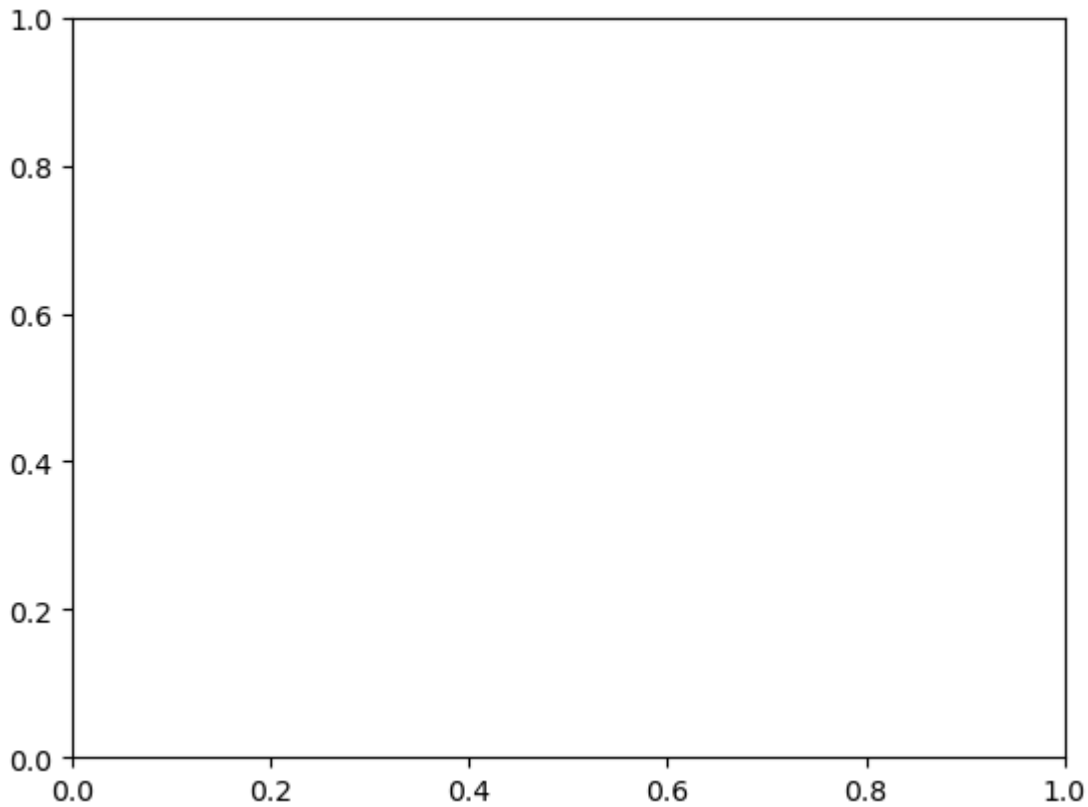
Out[26]:
```
[<matplotlib.lines.Line2D at 0x1ba49e134d0>]
```



In [27]:
```
plt.plot(Salary[0],ls='*')
```

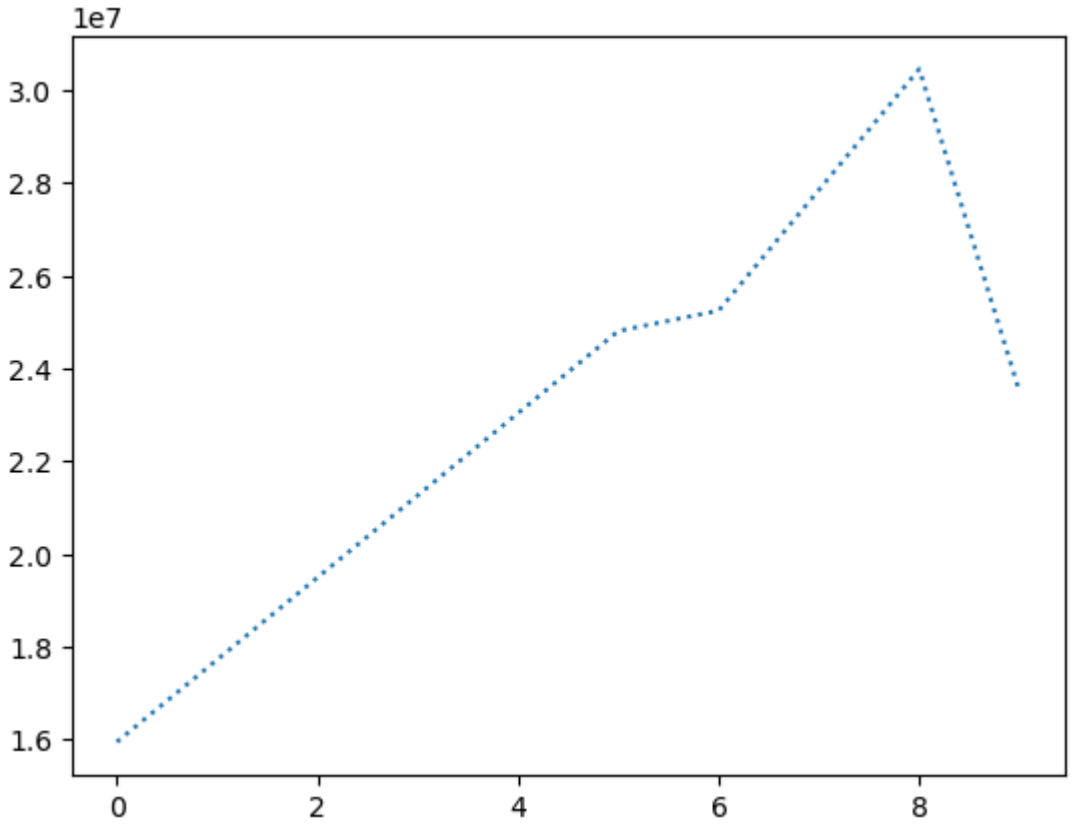
```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
Cell In[27], line 1
----> 1 plt.plot(Salary[0],ls='*')

File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3794, in plot(scalex, sca
ley, data, *args, **kwargs)
   3786 @_copy_docstring_and_deprecators(Axes.plot)
   3787 def plot(
   3788     *args: float | ArrayLike | str,
   (...)
   3792     **kwargs,
   3793 ) -> list[Line2D]:
-> 3794     return gca().plot(
   3795         *args,
   3796         scalex=scalex,
   3797         scaley=scaley,
   3798         **({"data": data} if data is not None else {}),
   3799         **kwargs,
   3800     )

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:1779, in Axes.plot(se
lf, scalex, scaley, data, *args, **kwargs)
   1536 """
   1537 Plot y versus x as lines and/or markers.
   1538
   (...)
   1776 (``'green'``) or hex strings (``'#008000'``).
   1777 """
   1778 kwargs = cbook.normalize_kwargs(kwargs, mlines.Line2D)
-> 1779 lines = [*self._get_lines(self, *args, data=data, **kwargs)]
   1780 for line in lines:
   1781     self.add_line(line)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:296, in _process_plot
_var_args.__call__(self, axes, data, *args, **kwargs)
    294     this += args[0],
    295     args = args[1:]
--> 296 yield from self._plot_args(
    297     axes, this, kwargs, ambiguous_fmt_datakey=ambiguous_fmt_datakey)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:534, in _process_plot
_var_args._plot_args(self, axes, tup, kwargs, return_kwargs, ambiguous_fmt_datake
y)
    532     return list(result)
    533 else:
--> 534     return [l[0] for l in result]

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:527, in <genexpr>(.0)
    522 else:
    523     raise ValueError(
    524         f"label must be scalar or have the same length as the input "
    525         f"data, but found {len(label)} for {n_datasets} datasets.")
--> 527 result = (make_artist(axes, x[:, j % ncx], y[:, j % ncy], kw,
    528                       {**kwargs, 'label': label})
    529           for j, label in enumerate(labels))
    531 if return_kwargs:
    532     return list(result)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:335, in _process_plot
```

```
_var_args._makeline(self, axes, x, y, kw, kwargs)
    333 kw = {**kw, **kwargs}  # Don't modify the original kw.
    334 self._setdefaults(self._getdefaults(kw), kw)
--> 335 seg = mlines.Line2D(x, y, **kw)
    336 return seg, kw

File ~\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 ~\anaconda3\Lib\site-packages\matplotlib\lines.py:1177, in Line2D.set_linestyle(self, ls)
   1175 if ls in [' ', '', 'none']:
   1176     ls = 'None'
-> 1177 _api.check_in_list([*self._lineStyles, *ls_mapper_r], ls=ls)
   1178 if ls not in self._lineStyles:
   1179     ls = ls_mapper_r[ls]

File ~\anaconda3\Lib\site-packages\matplotlib\_api\__init__.py:129, in check_in_list(values, _print_supported_values, **kwargs)
    127 if _print_supported_values:
    128     msg += f"; supported values are {', '.join(map(repr, values))}"
--> 129 raise ValueError(msg)

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



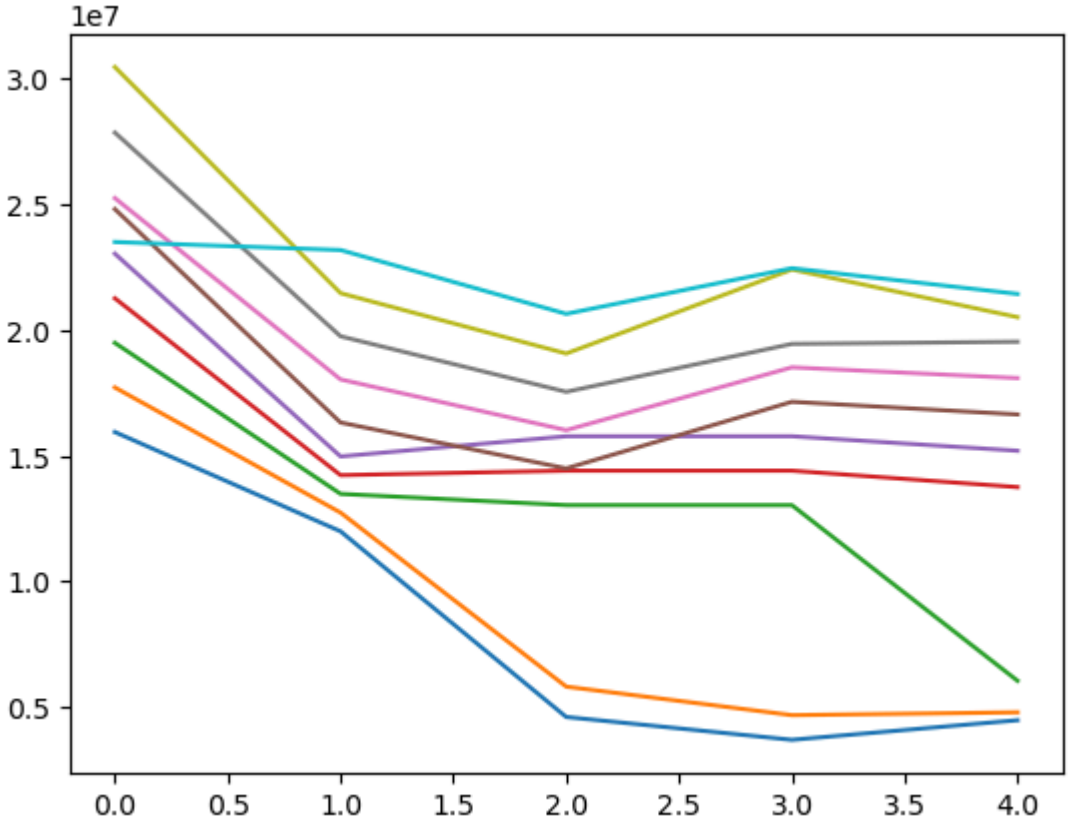
In [28]:
```
plt.plot(Salary[0],ls=':')
```

Out[28]: [<matplotlib.lines.Line2D at 0x1ba49e669c0>]



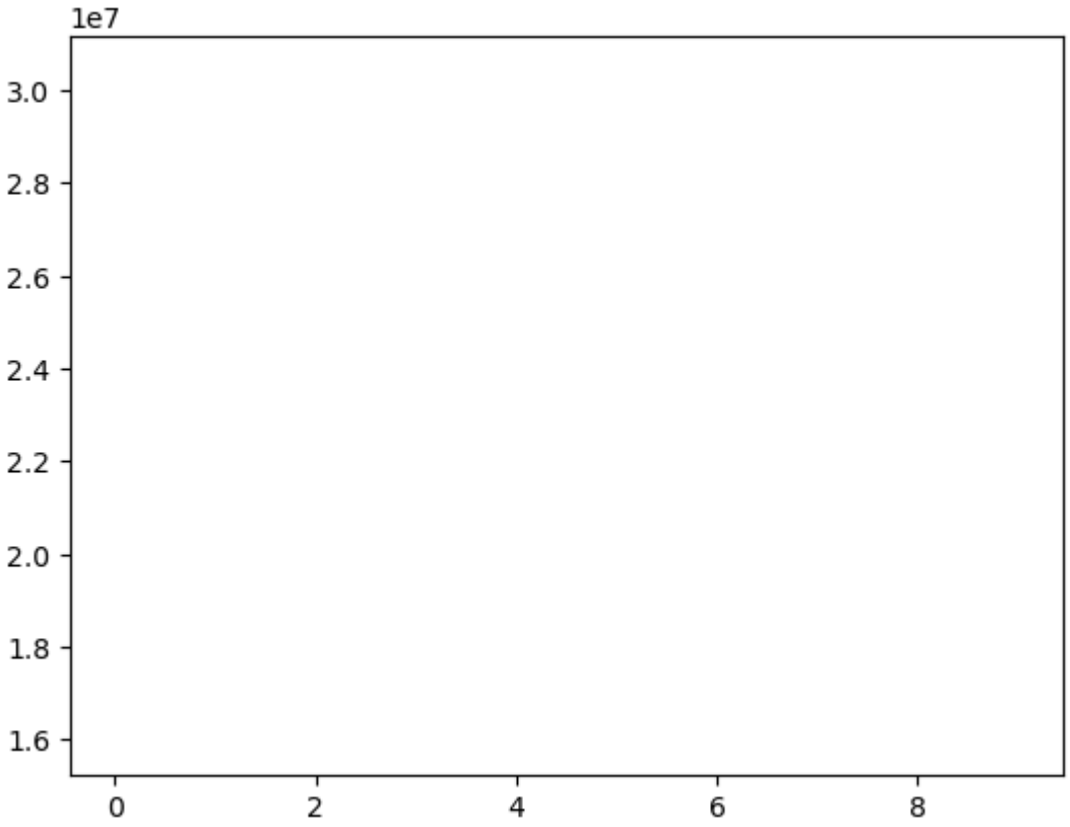
In [29]:
```
plt.plot(Salary[0:5],ls='-')
```

Out[29]:
```
[<matplotlib.lines.Line2D at 0x1ba4f2ec650>,
 <matplotlib.lines.Line2D at 0x1ba4f2ec6e0>,
 <matplotlib.lines.Line2D at 0x1ba4f2ec7d0>,
 <matplotlib.lines.Line2D at 0x1ba4f2ec890>,
 <matplotlib.lines.Line2D at 0x1ba4f2ec980>,
 <matplotlib.lines.Line2D at 0x1ba4f2eca70>,
 <matplotlib.lines.Line2D at 0x1ba4f2ecb60>,
 <matplotlib.lines.Line2D at 0x1ba4f2ecc50>,
 <matplotlib.lines.Line2D at 0x1ba4f2ecd40>,
 <matplotlib.lines.Line2D at 0x1ba4f2ece30>]
```



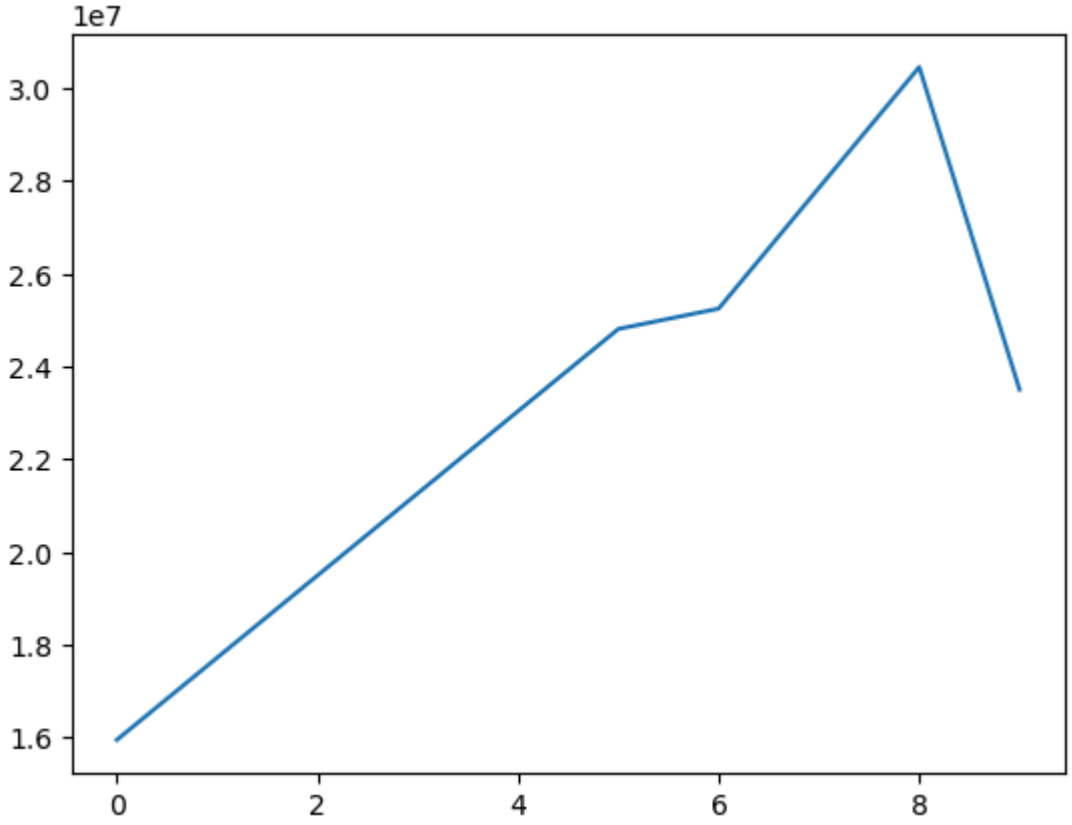
In [30]:
```
plt.plot(Salary[0],ls=' ')
```

Out[30]:
```
[<matplotlib.lines.Line2D at 0x1ba4f4838f0>]
```



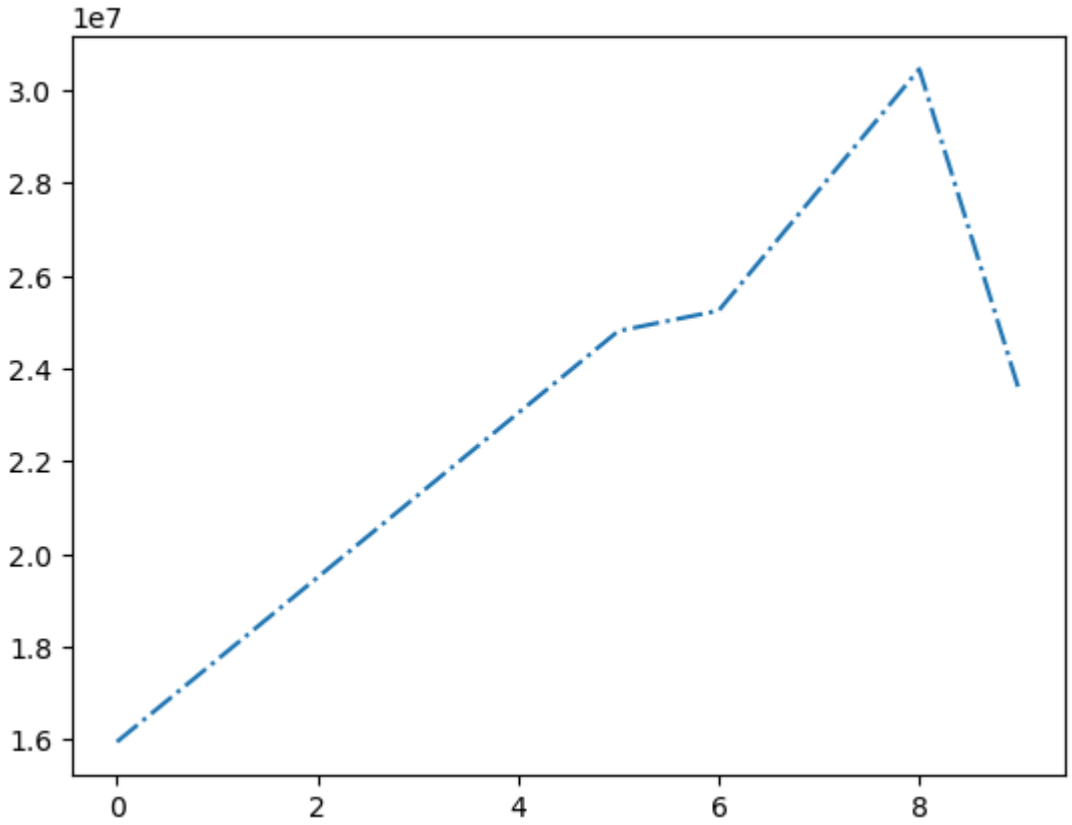
In [31]:
```
plt.plot(Salary[0],ls='solid')
```

Out[31]:
```
[<matplotlib.lines.Line2D at 0x1ba4f5092e0>]
```



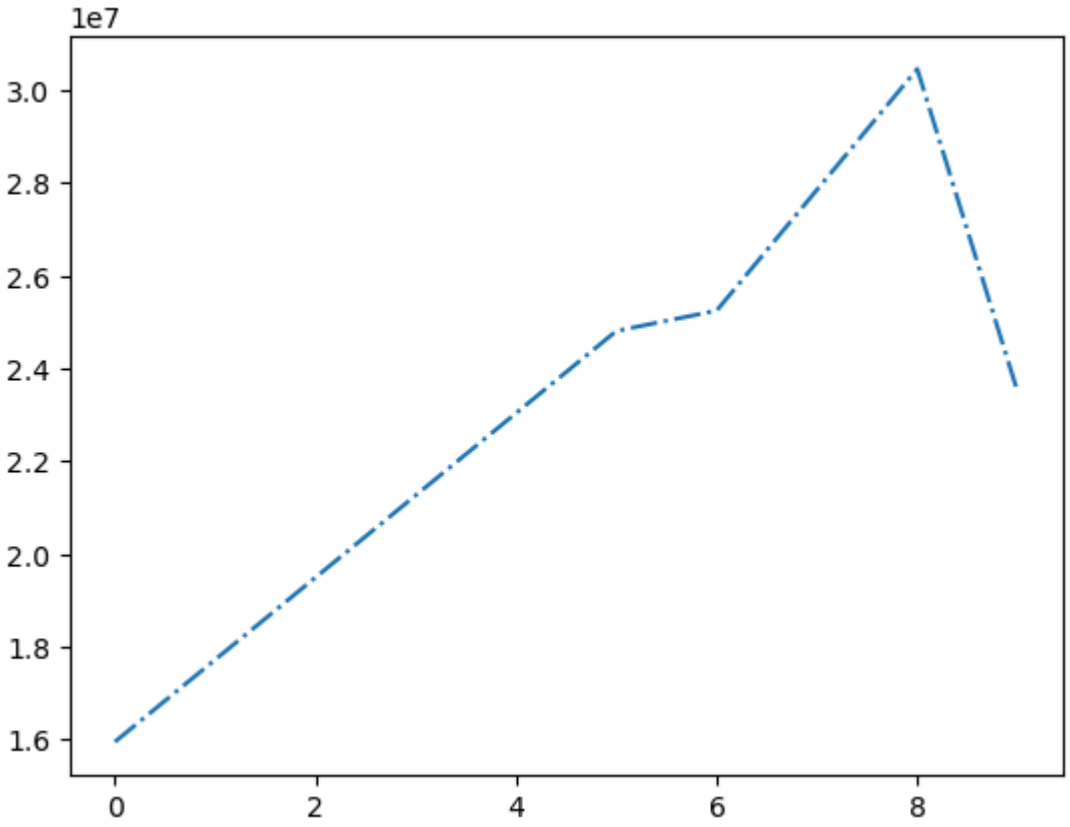
In [32]:
```
plt.plot(Salary[0],ls='-.')
```

Out[32]:
```
[<matplotlib.lines.Line2D at 0x1ba4f32dac0>]
```



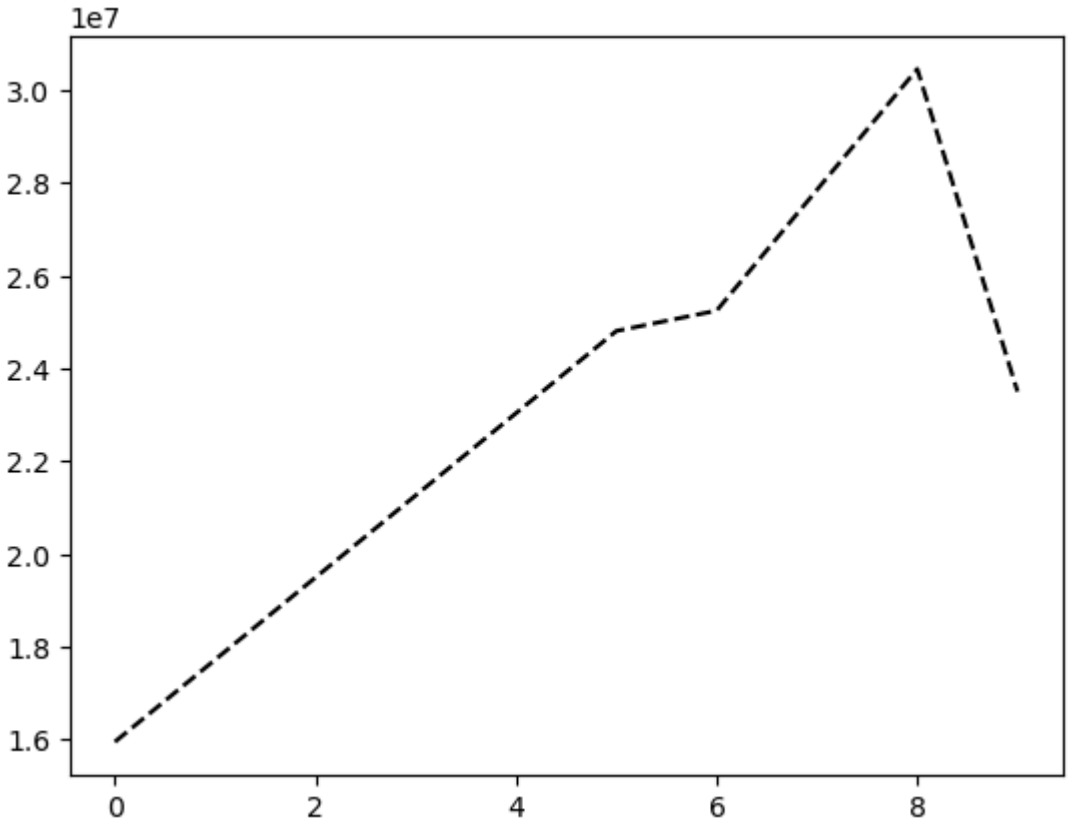
In [34]:
```
plt.plot(Salary[0],ls='dashdot')
```

Out[34]:
```
[<matplotlib.lines.Line2D at 0x1ba4f5b6de0>]
```



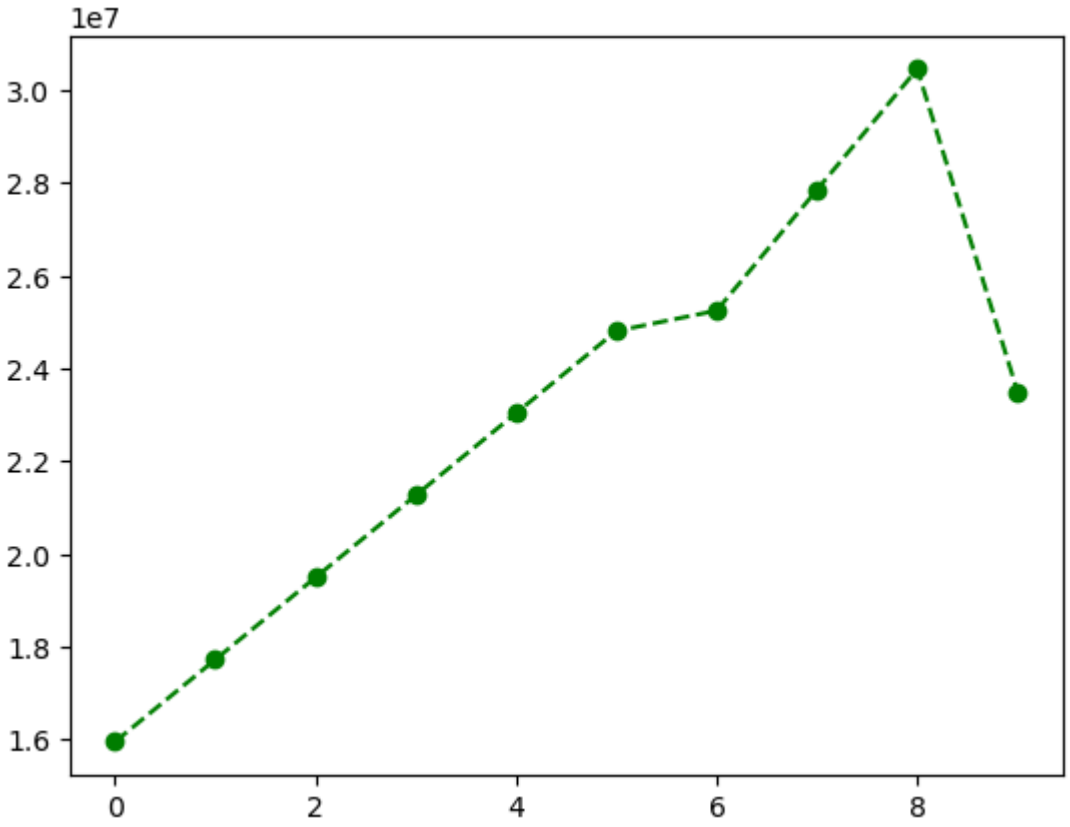
In [35]:
```
plt.plot(Salary[0],ls='--',color='black')
```

Out[35]:
```
[<matplotlib.lines.Line2D at 0x1ba4f634350>]
```



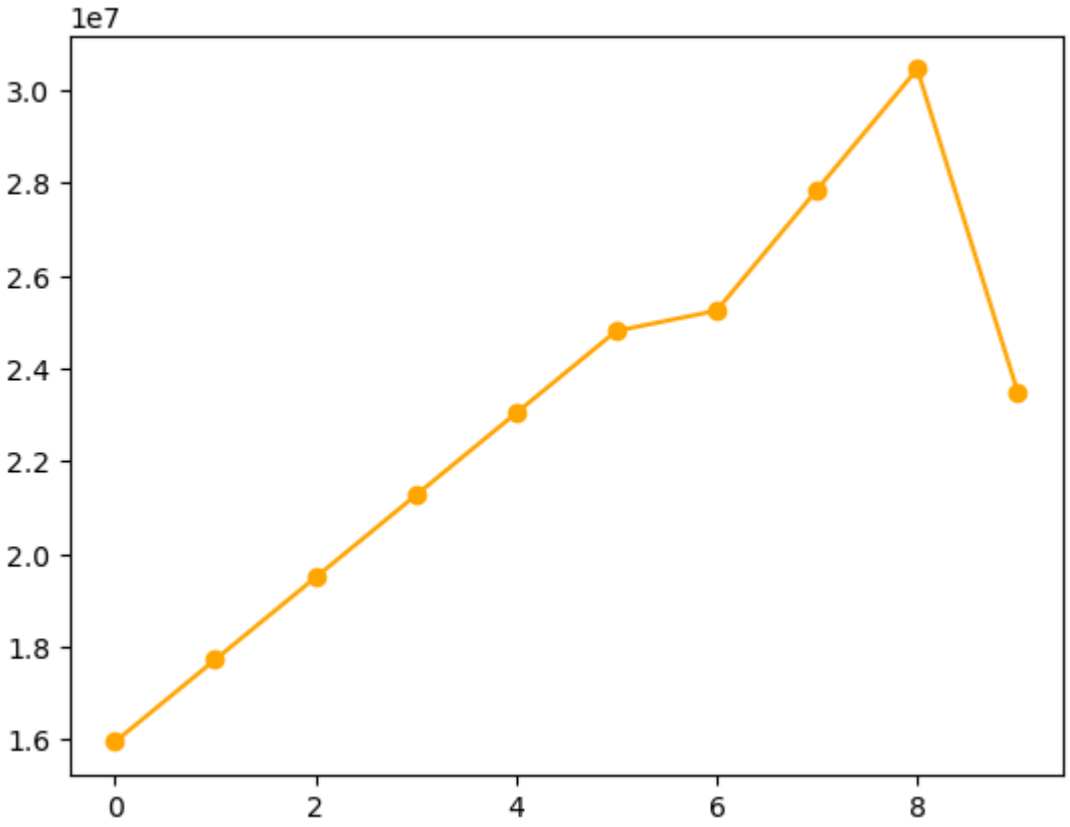
In [37]:
```
plt.plot(Salary[0],ls='--', color='green',marker='o')
```

Out[37]:
```
[<matplotlib.lines.Line2D at 0x1ba50f80a70>]
```



In [38]:
```
plt.plot(Salary[0],ls='-',color='orange',marker='o')
```

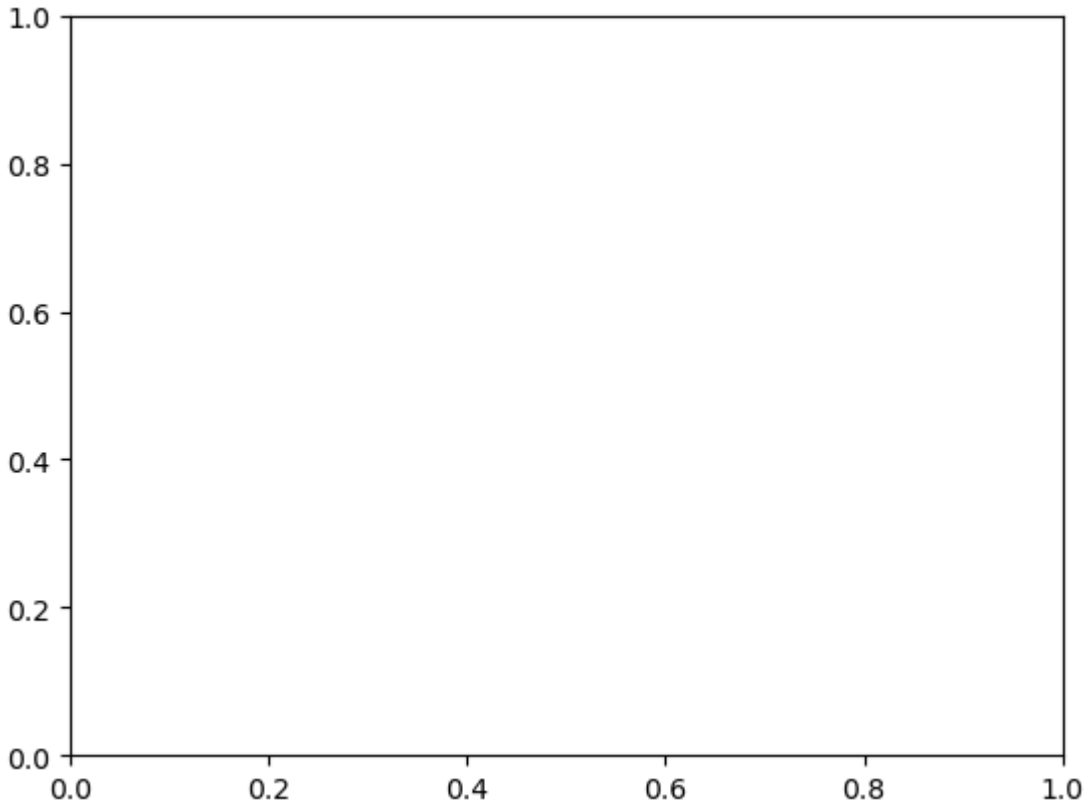
Out[38]:
```
[<matplotlib.lines.Line2D at 0x1ba5100d820>]
```



In [43]:
```
plt.plot(Salary[0],ls='-',color='gradientblue',marker='o')
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
Cell In[43], line 1
----> 1 plt.plot(Salary[0],ls='-',color='gradientblue ',marker='o')

File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3794, in plot(scalex, sca
ley, data, *args, **kwargs)
   3786 @_copy_docstring_and_deprecators(Axes.plot)
   3787 def plot(
   3788     *args: float | ArrayLike | str,
   (...)
   3792     **kwargs,
   3793 ) -> list[Line2D]:
-> 3794     return gca().plot(
   3795         *args,
   3796         scalex=scalex,
   3797         scaley=scaley,
   3798         **({"data": data} if data is not None else {}),
   3799         **kwargs,
   3800     )

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:1779, in Axes.plot(se
lf, scalex, scaley, data, *args, **kwargs)
   1536 """
   1537 Plot y versus x as lines and/or markers.
   1538
   (...)
   1776 (``'green'``) or hex strings (``'#008000'``).
   1777 """
   1778 kwargs = cbook.normalize_kwargs(kwargs, mlines.Line2D)
-> 1779 lines = [*self._get_lines(self, *args, data=data, **kwargs)]
   1780 for line in lines:
   1781     self.add_line(line)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:296, in _process_plot
_var_args.__call__(self, axes, data, *args, **kwargs)
    294     this += args[0],
    295     args = args[1:]
--> 296 yield from self._plot_args(
    297     axes, this, kwargs, ambiguous_fmt_datakey=ambiguous_fmt_datakey)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:534, in _process_plot
_var_args._plot_args(self, axes, tup, kwargs, return_kwargs, ambiguous_fmt_datake
y)
    532     return list(result)
    533 else:
--> 534     return [l[0] for l in result]

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:527, in <genexpr>(.0)
    522 else:
    523     raise ValueError(
    524         f"label must be scalar or have the same length as the input "
    525         f"data, but found {len(label)} for {n_datasets} datasets.")
--> 527 result = (make_artist(axes, x[:, j % ncx], y[:, j % ncy], kw,
    528                       {**kwargs, 'label': label})
    529           for j, label in enumerate(labels))
    531 if return_kwargs:
    532     return list(result)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:335, in _process_plot
```

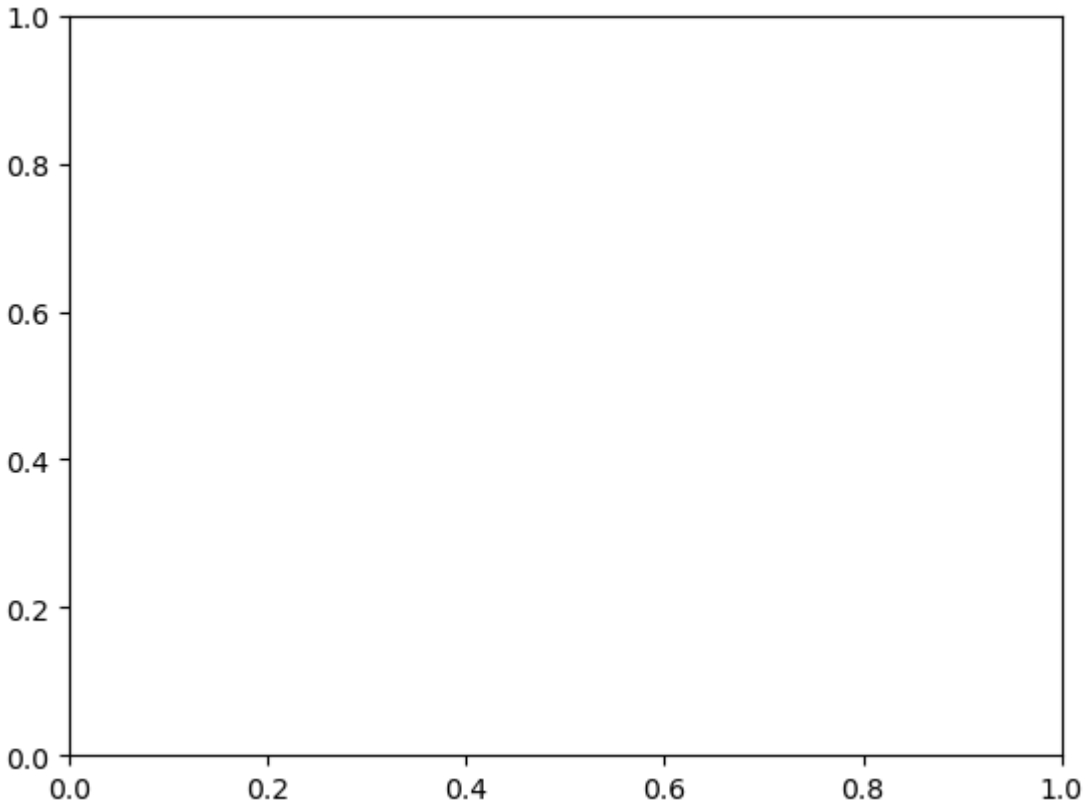
```
_var_args._makeline(self, axes, x, y, kw, kwargs)
    333 kw = {**kw, **kwargs}  # Don't modify the original kw.
    334 self._setdefaults(self._getdefaults(kw), kw)
--> 335 seg = mlines.Line2D(x, y, **kw)
    336 return seg, kw

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:376, 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)
    373 self.set_drawstyle(drawstyle)
    375 self._color = None
--> 376 self.set_color(color)
    377 if marker is None:
    378     marker = 'none'  # Default.

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:1066, in Line2D.set_color(self, color)
   1058 def set_color(self, color):
   1059     """
   1060     Set the color of the line.
   1061
   (...)
   1064     color : :mpltype:`color`
   1065     """
-> 1066     mcolors._check_color_like(color=color)
   1067     self._color = color
   1068     self.stale = True

File ~\anaconda3\Lib\site-packages\matplotlib\colors.py:246, in _check_color_like(**kwargs)
    244 for k, v in kwargs.items():
    245     if not is_color_like(v):
--> 246         raise ValueError(
    247             f"{v!r} is not a valid value for {k}: supported inputs are "
    248             f"(r, g, b) and (r, g, b, a) 0-1 float tuples; "
    249             f"'#rrggbb', '#rrggbbaa', '#rgb', '#rgba' strings; "
    250             f"named color strings; "
    251             f"string reprs of 0-1 floats for grayscale values; "
    252             f"'C0', 'C1', ... strings for colors of the color cycle; "
    253             f"and pairs combining one of the above with an alpha value")

ValueError: 'gradientblue ' is not a valid value for color: supported inputs are (r, g, b) and (r, g, b, a) 0-1 float tuples; '#rrggbb', '#rrggbbaa', '#rgb', '#rgba' strings; named color strings; string reprs of 0-1 floats for grayscale values; 'C0', 'C1', ... strings for colors of the color cycle; and pairs combining one of the above with an alpha value
```



In [44]:
```
plt.plot(Salary[0],ls='-',color=' ',marker='o')
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
Cell In[44], line 1
----> 1 plt.plot(Salary[0],ls='-',color=' ',marker='o')

File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3794, in plot(scalex, sca
ley, data, *args, **kwargs)
   3786 @_copy_docstring_and_deprecators(Axes.plot)
   3787 def plot(
   3788     *args: float | ArrayLike | str,
   (...)
   3792     **kwargs,
   3793 ) -> list[Line2D]:
-> 3794     return gca().plot(
   3795         *args,
   3796         scalex=scalex,
   3797         scaley=scaley,
   3798         **({"data": data} if data is not None else {}),
   3799         **kwargs,
   3800     )

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:1779, in Axes.plot(se
lf, scalex, scaley, data, *args, **kwargs)
   1536 """
   1537 Plot y versus x as lines and/or markers.
   1538
   (...)
   1776 (``'green'``) or hex strings (``'#008000'``).
   1777 """
   1778 kwargs = cbook.normalize_kwargs(kwargs, mlines.Line2D)
-> 1779 lines = [*self._get_lines(self, *args, data=data, **kwargs)]
   1780 for line in lines:
   1781     self.add_line(line)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:296, in _process_plot
_var_args.__call__(self, axes, data, *args, **kwargs)
    294     this += args[0],
    295     args = args[1:]
--> 296 yield from self._plot_args(
    297     axes, this, kwargs, ambiguous_fmt_datakey=ambiguous_fmt_datakey)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:534, in _process_plot
_var_args._plot_args(self, axes, tup, kwargs, return_kwargs, ambiguous_fmt_datake
y)
    532     return list(result)
    533 else:
--> 534     return [l[0] for l in result]

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:527, in <genexpr>(.0)
    522 else:
    523     raise ValueError(
    524         f"label must be scalar or have the same length as the input "
    525         f"data, but found {len(label)} for {n_datasets} datasets.")
--> 527 result = (make_artist(axes, x[:, j % ncx], y[:, j % ncy], kw,
    528                       {**kwargs, 'label': label})
    529           for j, label in enumerate(labels))
    531 if return_kwargs:
    532     return list(result)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:335, in _process_plot
```

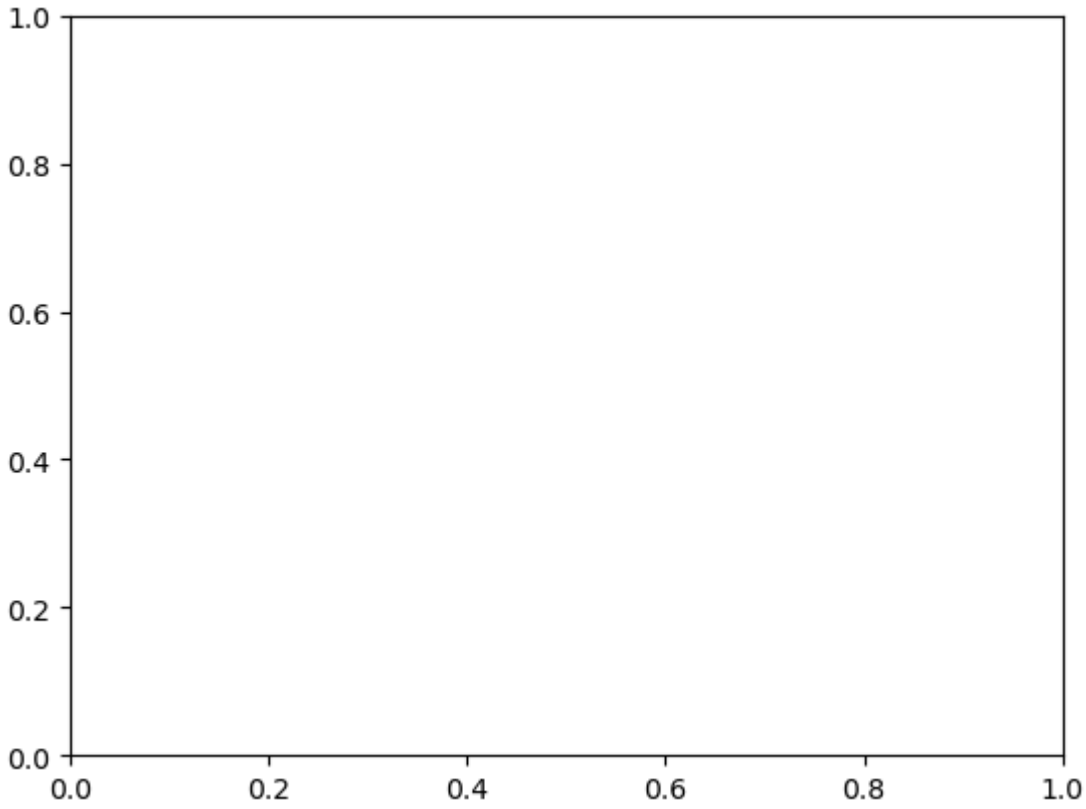
```
_var_args._makeline(self, axes, x, y, kw, kwargs)
    333 kw = {**kw, **kwargs}  # Don't modify the original kw.
    334 self._setdefaults(self._getdefaults(kw), kw)
--> 335 seg = mlines.Line2D(x, y, **kw)
    336 return seg, kw

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:376, 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)
    373 self.set_drawstyle(drawstyle)
    375 self._color = None
--> 376 self.set_color(color)
    377 if marker is None:
    378     marker = 'none'  # Default.

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:1066, in Line2D.set_color(self, color)
   1058 def set_color(self, color):
   1059     """
   1060     Set the color of the line.
   1061
   (...)
   1064     color : :mpltype:`color`
   1065     """
-> 1066     mcolors._check_color_like(color=color)
   1067     self._color = color
   1068     self.stale = True

File ~\anaconda3\Lib\site-packages\matplotlib\colors.py:246, in _check_color_like(**kwargs)
    244 for k, v in kwargs.items():
    245     if not is_color_like(v):
--> 246         raise ValueError(
    247             f"{v!r} is not a valid value for {k}: supported inputs are "
    248             f"(r, g, b) and (r, g, b, a) 0-1 float tuples; "
    249             f"'#rrggbb', '#rrggbbaa', '#rgb', '#rgba' strings; "
    250             f"named color strings; "
    251             f"string reprs of 0-1 floats for grayscale values; "
    252             f"'C0', 'C1', ... strings for colors of the color cycle; "
    253             f"and pairs combining one of the above with an alpha value")

ValueError: ' ' is not a valid value for color: supported inputs are (r, g, b) and (r, g, b, a) 0-1 float tuples; '#rrggbb', '#rrggbbaa', '#rgb', '#rgba' strings; named color strings; string reprs of 0-1 floats for grayscale values; 'C0', 'C1', ... strings for colors of the color cycle; and pairs combining one of the above with an alpha value
```



In [45]:
```
plt.plot(Salary[0],ls='-',color='inkblue',marker='o')
```

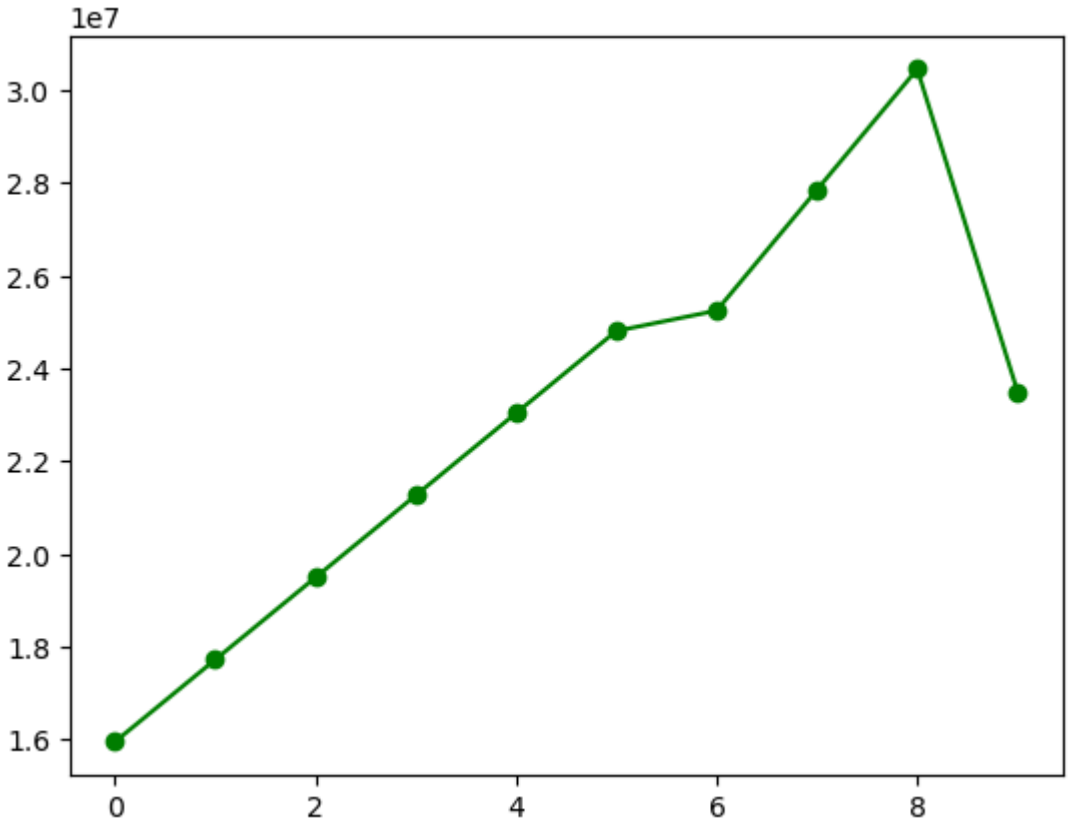
```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
Cell In[45], line 1
----> 1 plt.plot(Salary[0],ls='-',color='inkblue',marker='o')

File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3794, in plot(scalex, sca
ley, data, *args, **kwargs)
   3786 @_copy_docstring_and_deprecators(Axes.plot)
   3787 def plot(
   3788     *args: float | ArrayLike | str,
   (...)
   3792     **kwargs,
   3793 ) -> list[Line2D]:
-> 3794     return gca().plot(
   3795         *args,
   3796         scalex=scalex,
   3797         scaley=scaley,
   3798         **({"data": data} if data is not None else {}),
   3799         **kwargs,
   3800     )

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:1779, in Axes.plot(se
lf, scalex, scaley, data, *args, **kwargs)
   1536 """
   1537 Plot y versus x as lines and/or markers.
   1538
   (...)
   1776 (``'green'``) or hex strings (``'#008000'``).
   1777 """
   1778 kwargs = cbook.normalize_kwargs(kwargs, mlines.Line2D)
-> 1779 lines = [*self._get_lines(self, *args, data=data, **kwargs)]
   1780 for line in lines:
   1781     self.add_line(line)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:296, in _process_plot
_var_args.__call__(self, axes, data, *args, **kwargs)
    294     this += args[0],
    295     args = args[1:]
--> 296 yield from self._plot_args(
    297     axes, this, kwargs, ambiguous_fmt_datakey=ambiguous_fmt_datakey)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:534, in _process_plot
_var_args._plot_args(self, axes, tup, kwargs, return_kwargs, ambiguous_fmt_datake
y)
    532     return list(result)
    533 else:
--> 534     return [l[0] for l in result]

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:527, in <genexpr>(.0)
    522 else:
    523     raise ValueError(
    524         f"label must be scalar or have the same length as the input "
    525         f"data, but found {len(label)} for {n_datasets} datasets.")
--> 527 result = (make_artist(axes, x[:, j % ncx], y[:, j % ncy], kw,
    528                       {**kwargs, 'label': label})
    529           for j, label in enumerate(labels))
    531 if return_kwargs:
    532     return list(result)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:335, in _process_plot
```

```
_var_args._makeline(self, axes, x, y, kw, kwargs)
    333 kw = {**kw, **kwargs}  # Don't modify the original kw.
    334 self._setdefaults(self._getdefaults(kw), kw)
--> 335 seg = mlines.Line2D(x, y, **kw)
    336 return seg, kw

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:376, 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)
    373 self.set_drawstyle(drawstyle)
    375 self._color = None
--> 376 self.set_color(color)
    377 if marker is None:
    378     marker = 'none'  # Default.

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:1066, in Line2D.set_color(self, color)
   1058 def set_color(self, color):
   1059     """
   1060     Set the color of the line.
   1061
   (...)
   1064     color : :mpltype:`color`
   1065     """
-> 1066     mcolors._check_color_like(color=color)
   1067     self._color = color
   1068     self.stale = True

File ~\anaconda3\Lib\site-packages\matplotlib\colors.py:246, in _check_color_like(**kwargs)
    244 for k, v in kwargs.items():
    245     if not is_color_like(v):
--> 246         raise ValueError(
    247             f"{v!r} is not a valid value for {k}: supported inputs are "
    248             f"(r, g, b) and (r, g, b, a) 0-1 float tuples; "
    249             f"'#rrggbb', '#rrggbbaa', '#rgb', '#rgba' strings; "
    250             f"named color strings; "
    251             f"string reprs of 0-1 floats for grayscale values; "
    252             f"'C0', 'C1', ... strings for colors of the color cycle; "
    253             f"and pairs combining one of the above with an alpha value")

ValueError: 'inkblue' is not a valid value for color: supported inputs are (r, g, b) and (r, g, b, a) 0-1 float tuples; '#rrggbb', '#rrggbbaa', '#rgb', '#rgba' strings; named color strings; string reprs of 0-1 floats for grayscale values; 'C0', 'C1', ... strings for colors of the color cycle; and pairs combining one of the above with an alpha value
```



In [46]:
```
plt.plot(Salary[0],ls='-',color='green',marker='o')
```

Out[46]:
```
[<matplotlib.lines.Line2D at 0x1ba51b09220>]
```

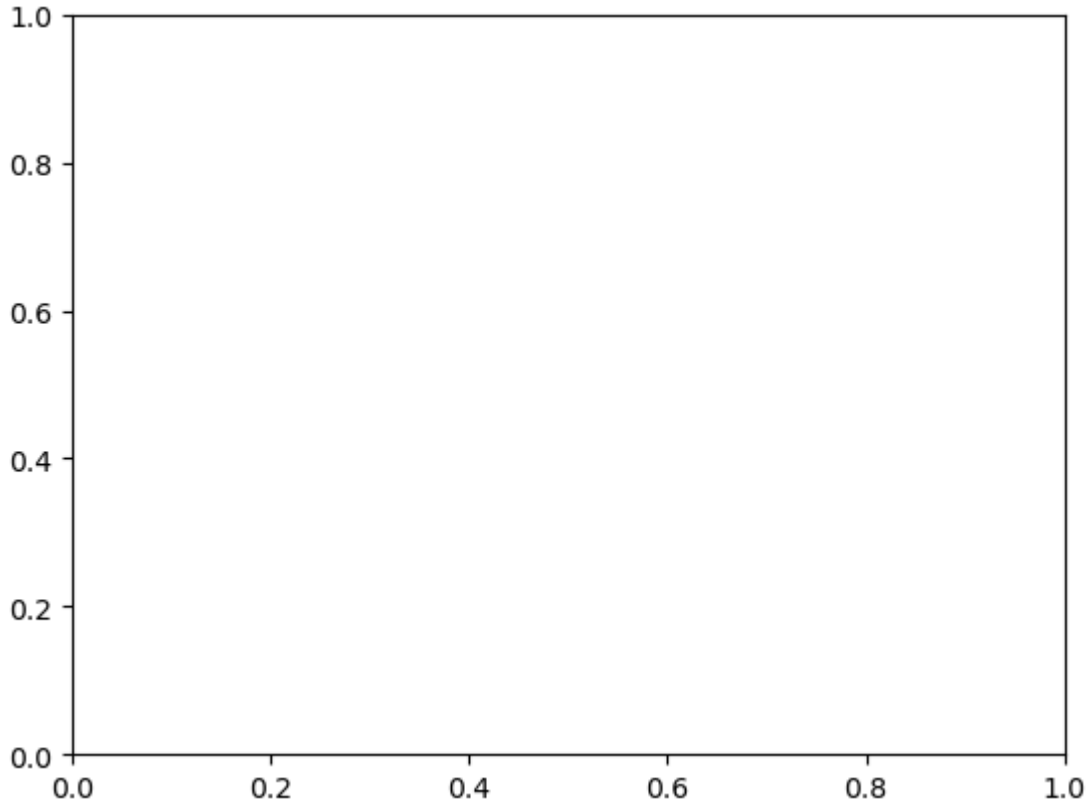


In [47]:
```
plt.plot(Salary[0],ls='--',color='green',marker='square')
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:326, in MarkerStyle._set
_marker(self, marker)
    325 try:
--> 326     Path(marker)
    327     self._marker_function = self._set_vertices

File ~\anaconda3\Lib\site-packages\matplotlib\path.py:129, in Path.__init__(self,
vertices, codes, _interpolation_steps, closed, readonly)
    101 """
    102 Create a new path with the given vertices and codes.
    103
   (...)
    127     and codes as read-only arrays.
    128 """
--> 129 vertices = _to_unmasked_float_array(vertices)
    130 _api.check_shape((None, 2), vertices=vertices)

File ~\anaconda3\Lib\site-packages\matplotlib\cbook.py:1398, in _to_unmasked_floa
t_array(x)
   1397 else:
-> 1398     return np.asarray(x, float)

ValueError: could not convert string to float: 'square'

The above exception was the direct cause of the following exception:

ValueError                                Traceback (most recent call last)
Cell In[47], line 1
----> 1 plt.plot(Salary[0],ls='--',color='green',marker='square')

File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3794, in plot(scalex, sca
ley, data, *args, **kwargs)
   3786 @_copy_docstring_and_deprecators(Axes.plot)
   3787 def plot(
   3788     *args: float | ArrayLike | str,
   (...)
   3792     **kwargs,
   3793 ) -> list[Line2D]:
-> 3794     return gca().plot(
   3795         *args,
   3796         scalex=scalex,
   3797         scaley=scaley,
   3798         **({"data": data} if data is not None else {}),
   3799         **kwargs,
   3800     )

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:1779, in Axes.plot(se
lf, scalex, scaley, data, *args, **kwargs)
   1536 """
   1537 Plot y versus x as lines and/or markers.
   1538
   (...)
   1776 (``'green'``) or hex strings (``'#008000'``).
   1777 """
   1778 kwargs = cbook.normalize_kwargs(kwargs, mlines.Line2D)
-> 1779 lines = [*self._get_lines(self, *args, data=data, **kwargs)]
   1780 for line in lines:
   1781     self.add_line(line)
```

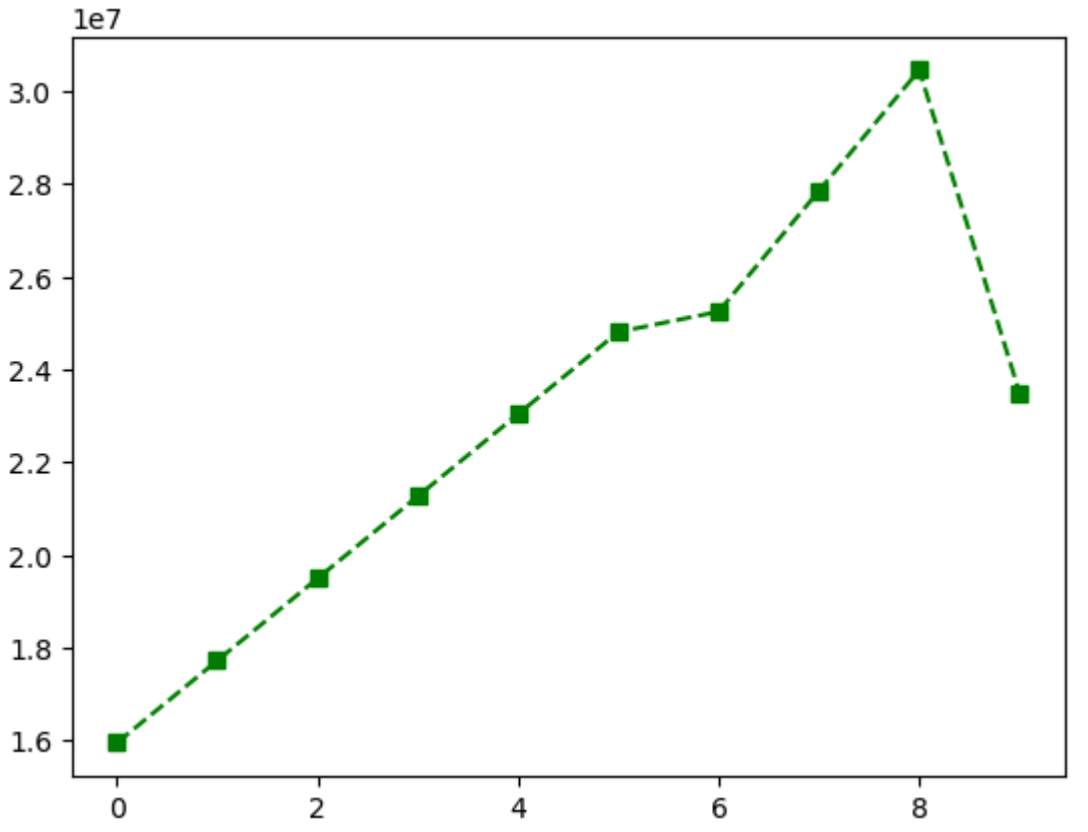
```
File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:296, in _process_plot_var_args.__call__(self, axes, data, *args, **kwargs)
    294     this += args[0],
    295     args = args[1:]
--> 296 yield from self._plot_args(
    297     axes, this, kwargs, ambiguous_fmt_datakey=ambiguous_fmt_datakey)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:534, in _process_plot_var_args._plot_args(self, axes, tup, kwargs, return_kwargs, ambiguous_fmt_datakey)
    532     return list(result)
    533 else:
--> 534     return [l[0] for l in result]

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:527, in <genexpr>(.0)
    522 else:
    523     raise ValueError(
    524         f"label must be scalar or have the same length as the input "
    525         f"data, but found {len(label)} for {n_datasets} datasets.")
--> 527 result = (make_artist(axes, x[:, j % ncx], y[:, j % ncy], kw,
    528                       {**kwargs, 'label': label})
    529           for j, label in enumerate(labels))
    531 if return_kwargs:
    532     return list(result)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:335, in _process_plot_var_args._makeline(self, axes, x, y, kw, kwargs)
    333 kw = {**kw, **kwargs}  # Don't modify the original kw.
    334 self._setdefaults(self._getdefaults(kw), kw)
--> 335 seg = mlines.Line2D(x, y, **kw)
    336 return seg, kw

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:380, 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)
    378     marker = 'none'  # Default.
    379 if not isinstance(marker, MarkerStyle):
--> 380     self._marker = MarkerStyle(marker, fillstyle)
    381 else:
    382     self._marker = marker

File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:248, in MarkerStyle.__init__(self, marker, fillstyle, transform, capstyle, joinstyle)
    246 self._user_joinstyle = JoinStyle(joinstyle) if joinstyle is not None else None
    247 self._set_fillstyle(fillstyle)
--> 248 self._set_marker(marker)

File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:329, in MarkerStyle._set_marker(self, marker)
    327         self._marker_function = self._set_vertices
    328     except ValueError as err:
--> 329         raise ValueError(
    330             f'Unrecognized marker style {marker!r}') from err
    332 if not isinstance(marker, MarkerStyle):
    333     self._marker = marker
```

```
ValueError: Unrecognized marker style 'square'
```



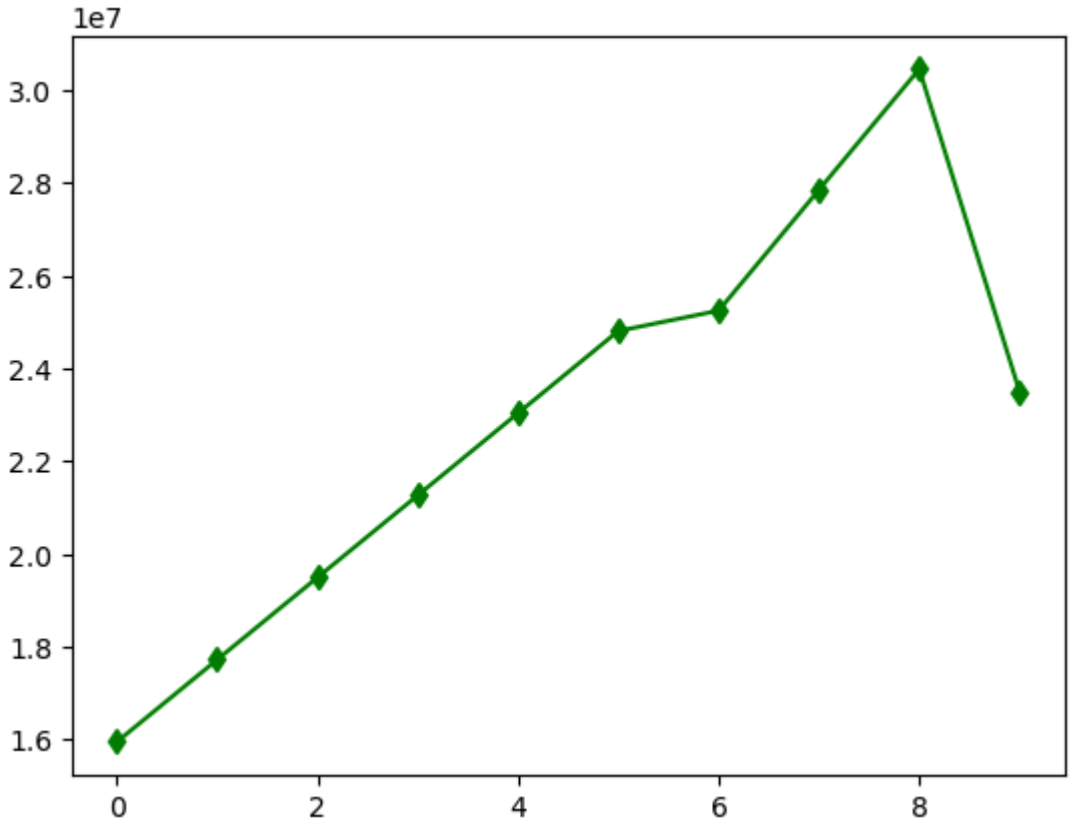
In [48]:
```
plt.plot(Salary[0],ls='--',color='green',marker='s')
```

Out[48]:
```
[<matplotlib.lines.Line2D at 0x1ba537d8d70>]
```



In [49]:
```
plt.plot(Salary[0],ls='-',color='green',marker='d')
```

Out[49]: [<matplotlib.lines.Line2D at 0x1ba537d8f50>]

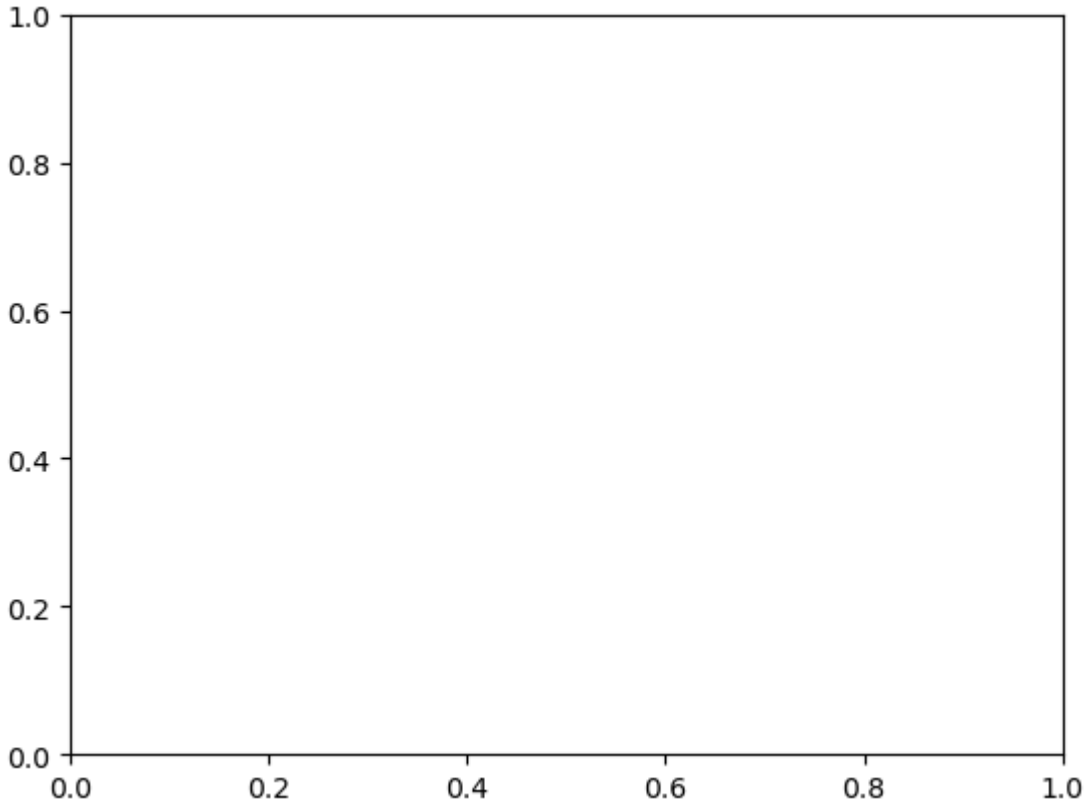


In [50]:
```
plt.plot(Salary[0],ls='-',color='green',marker='r')
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:326, in MarkerStyle._set
_marker(self, marker)
    325 try:
--> 326     Path(marker)
    327     self._marker_function = self._set_vertices

File ~\anaconda3\Lib\site-packages\matplotlib\path.py:129, in Path.__init__(self,
vertices, codes, _interpolation_steps, closed, readonly)
    101 """
    102 Create a new path with the given vertices and codes.
    103
   (...)
    127     and codes as read-only arrays.
    128 """
--> 129 vertices = _to_unmasked_float_array(vertices)
    130 _api.check_shape((None, 2), vertices=vertices)

File ~\anaconda3\Lib\site-packages\matplotlib\cbook.py:1398, in _to_unmasked_floa
t_array(x)
   1397 else:
-> 1398     return np.asarray(x, float)

ValueError: could not convert string to float: 'r'

The above exception was the direct cause of the following exception:

ValueError                                Traceback (most recent call last)
Cell In[50], line 1
----> 1 plt.plot(Salary[0],ls='-',color='green',marker='r')

File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3794, in plot(scalex, sca
ley, data, *args, **kwargs)
   3786 @_copy_docstring_and_deprecators(Axes.plot)
   3787 def plot(
   3788     *args: float | ArrayLike | str,
   (...)
   3792     **kwargs,
   3793 ) -> list[Line2D]:
-> 3794     return gca().plot(
   3795         *args,
   3796         scalex=scalex,
   3797         scaley=scaley,
   3798         **({"data": data} if data is not None else {}),
   3799         **kwargs,
   3800     )

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:1779, in Axes.plot(se
lf, scalex, scaley, data, *args, **kwargs)
   1536 """
   1537 Plot y versus x as lines and/or markers.
   1538
   (...)
   1776 (``'green'``) or hex strings (``'#008000'``).
   1777 """
   1778 kwargs = cbook.normalize_kwargs(kwargs, mlines.Line2D)
-> 1779 lines = [*self._get_lines(self, *args, data=data, **kwargs)]
   1780 for line in lines:
   1781     self.add_line(line)
```

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

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:534, in _process_plot_var_args._plot_args(self, axes, tup, kwargs, return_kwargs, ambiguous_fmt_datakey)
    532     return list(result)
    533 else:
--> 534     return [l[0] for l in result]

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:527, in <genexpr>(.0)
    522 else:
    523     raise ValueError(
    524         f"label must be scalar or have the same length as the input "
    525         f"data, but found {len(label)} for {n_datasets} datasets.")
--> 527 result = (make_artist(axes, x[:, j % ncx], y[:, j % ncy], kw,
    528                       {**kwargs, 'label': label})
    529           for j, label in enumerate(labels))
    531 if return_kwargs:
    532     return list(result)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:335, in _process_plot_var_args._makeline(self, axes, x, y, kw, kwargs)
    333 kw = {**kw, **kwargs}  # Don't modify the original kw.
    334 self._setdefaults(self._getdefaults(kw), kw)
--> 335 seg = mlines.Line2D(x, y, **kw)
    336 return seg, kw

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:380, 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)
    378     marker = 'none'  # Default.
    379 if not isinstance(marker, MarkerStyle):
--> 380     self._marker = MarkerStyle(marker, fillstyle)
    381 else:
    382     self._marker = marker

File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:248, in MarkerStyle.__init__(self, marker, fillstyle, transform, capstyle, joinstyle)
    246 self._user_joinstyle = JoinStyle(joinstyle) if joinstyle is not None else None
    247 self._set_fillstyle(fillstyle)
--> 248 self._set_marker(marker)

File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:329, in MarkerStyle._set_marker(self, marker)
    327         self._marker_function = self._set_vertices
    328     except ValueError as err:
--> 329         raise ValueError(
    330             f'Unrecognized marker style {marker!r}') from err
    332 if not isinstance(marker, MarkerStyle):
    333     self._marker = marker
```

```
ValueError: Unrecognized marker style 'r'
```

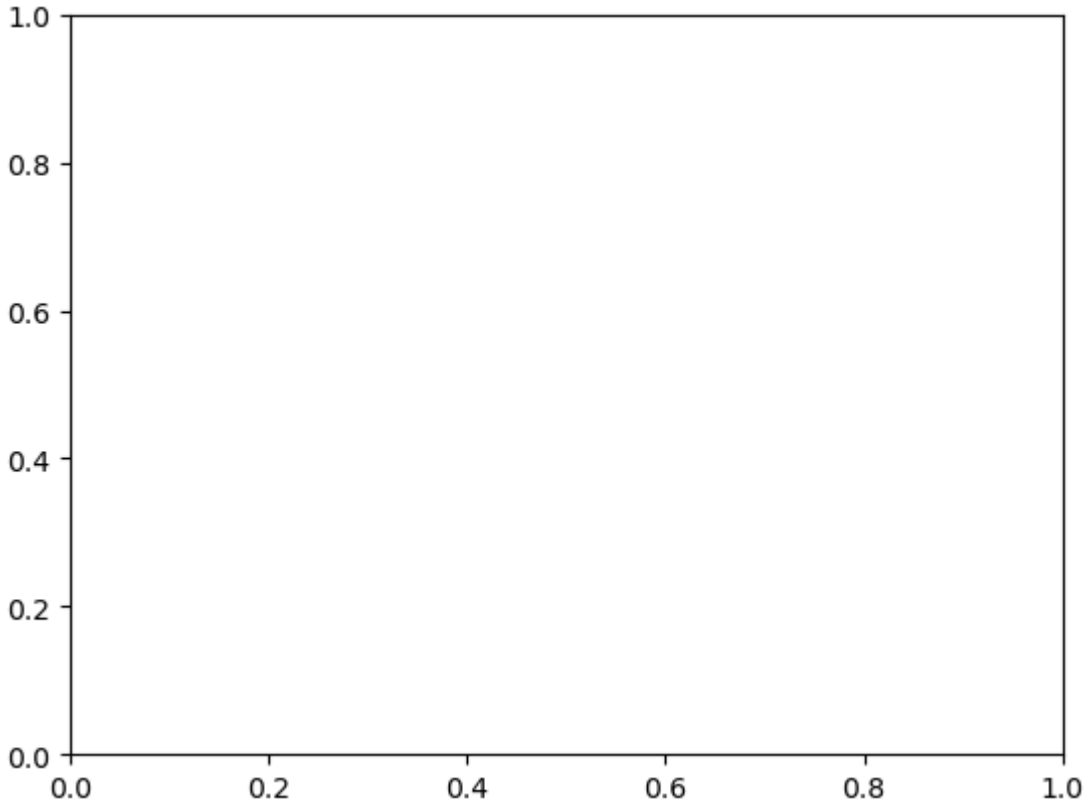


In [51]:
```
plt.plot(Salary[0],ls='-',color='green',marker='c')
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:326, in MarkerStyle._set
_marker(self, marker)
    325 try:
--> 326     Path(marker)
    327     self._marker_function = self._set_vertices

File ~\anaconda3\Lib\site-packages\matplotlib\path.py:129, in Path.__init__(self,
vertices, codes, _interpolation_steps, closed, readonly)
    101 """
    102 Create a new path with the given vertices and codes.
    103
   (...)
    127     and codes as read-only arrays.
    128 """
--> 129 vertices = _to_unmasked_float_array(vertices)
    130 _api.check_shape((None, 2), vertices=vertices)

File ~\anaconda3\Lib\site-packages\matplotlib\cbook.py:1398, in _to_unmasked_floa
t_array(x)
   1397 else:
-> 1398     return np.asarray(x, float)

ValueError: could not convert string to float: 'c'

The above exception was the direct cause of the following exception:

ValueError                                Traceback (most recent call last)
Cell In[51], line 1
----> 1 plt.plot(Salary[0],ls='-',color='green',marker='c')

File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3794, in plot(scalex, sca
ley, data, *args, **kwargs)
   3786 @_copy_docstring_and_deprecators(Axes.plot)
   3787 def plot(
   3788     *args: float | ArrayLike | str,
   (...)
   3792     **kwargs,
   3793 ) -> list[Line2D]:
-> 3794     return gca().plot(
   3795         *args,
   3796         scalex=scalex,
   3797         scaley=scaley,
   3798         **({"data": data} if data is not None else {}),
   3799         **kwargs,
   3800     )

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_axes.py:1779, in Axes.plot(se
lf, scalex, scaley, data, *args, **kwargs)
   1536 """
   1537 Plot y versus x as lines and/or markers.
   1538
   (...)
   1776 (``'green'``) or hex strings (``'#008000'``).
   1777 """
   1778 kwargs = cbook.normalize_kwargs(kwargs, mlines.Line2D)
-> 1779 lines = [*self._get_lines(self, *args, data=data, **kwargs)]
   1780 for line in lines:
   1781     self.add_line(line)
```

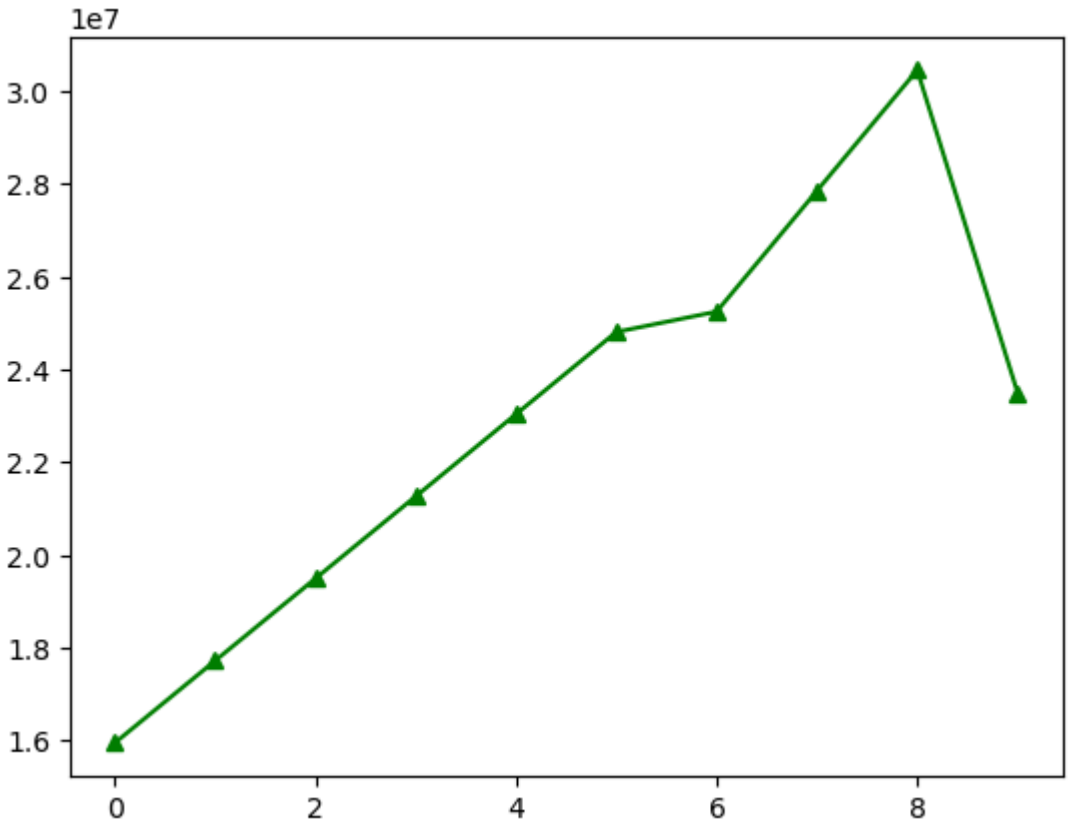
```
File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:296, in _process_plot_var_args.__call__(self, axes, data, *args, **kwargs)
    294     this += args[0],
    295     args = args[1:]
--> 296 yield from self._plot_args(
    297     axes, this, kwargs, ambiguous_fmt_datakey=ambiguous_fmt_datakey)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:534, in _process_plot_var_args._plot_args(self, axes, tup, kwargs, return_kwargs, ambiguous_fmt_datakey)
    532     return list(result)
    533 else:
--> 534     return [l[0] for l in result]

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:527, in <genexpr>(.0)
    522 else:
    523     raise ValueError(
    524         f"label must be scalar or have the same length as the input "
    525         f"data, but found {len(label)} for {n_datasets} datasets.")
--> 527 result = (make_artist(axes, x[:, j % ncx], y[:, j % ncy], kw,
    528                       {**kwargs, 'label': label})
    529           for j, label in enumerate(labels))
    531 if return_kwargs:
    532     return list(result)

File ~\anaconda3\Lib\site-packages\matplotlib\axes\_base.py:335, in _process_plot_var_args._makeline(self, axes, x, y, kw, kwargs)
    333 kw = {**kw, **kwargs}  # Don't modify the original kw.
    334 self._setdefaults(self._getdefaults(kw), kw)
--> 335 seg = mlines.Line2D(x, y, **kw)
    336 return seg, kw

File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:380, 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)
    378     marker = 'none'  # Default.
    379 if not isinstance(marker, MarkerStyle):
--> 380     self._marker = MarkerStyle(marker, fillstyle)
    381 else:
    382     self._marker = marker

File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:248, in MarkerStyle.__init__(self, marker, fillstyle, transform, capstyle, joinstyle)
    246 self._user_joinstyle = JoinStyle(joinstyle) if joinstyle is not None else None
    247 self._set_fillstyle(fillstyle)
--> 248 self._set_marker(marker)

File ~\anaconda3\Lib\site-packages\matplotlib\markers.py:329, in MarkerStyle._set_marker(self, marker)
    327         self._marker_function = self._set_vertices
    328     except ValueError as err:
--> 329         raise ValueError(
    330             f'Unrecognized marker style {marker!r}') from err
    332 if not isinstance(marker, MarkerStyle):
    333     self._marker = marker
```

```
ValueError: Unrecognized marker style 'c'
```



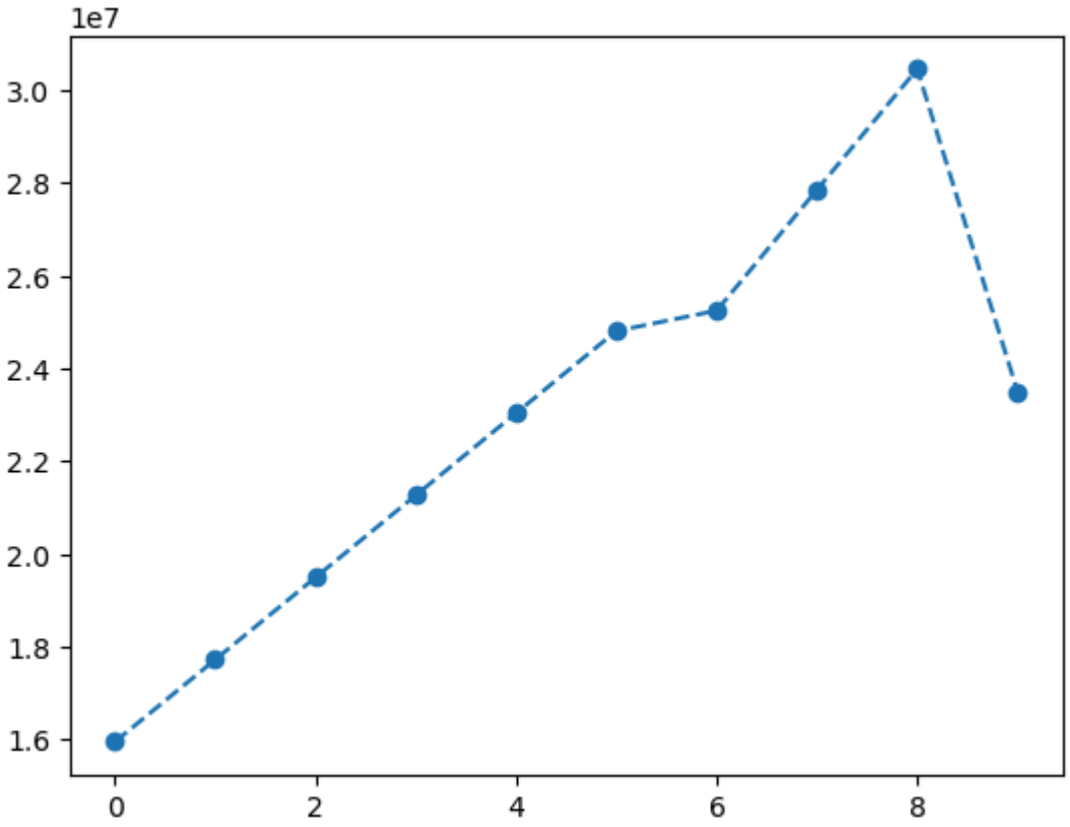
In [52]:
```
plt.plot(Salary[0],ls='-',color='green',marker='^')
```

Out[52]:
```
[<matplotlib.lines.Line2D at 0x1ba5395e1b0>]
```



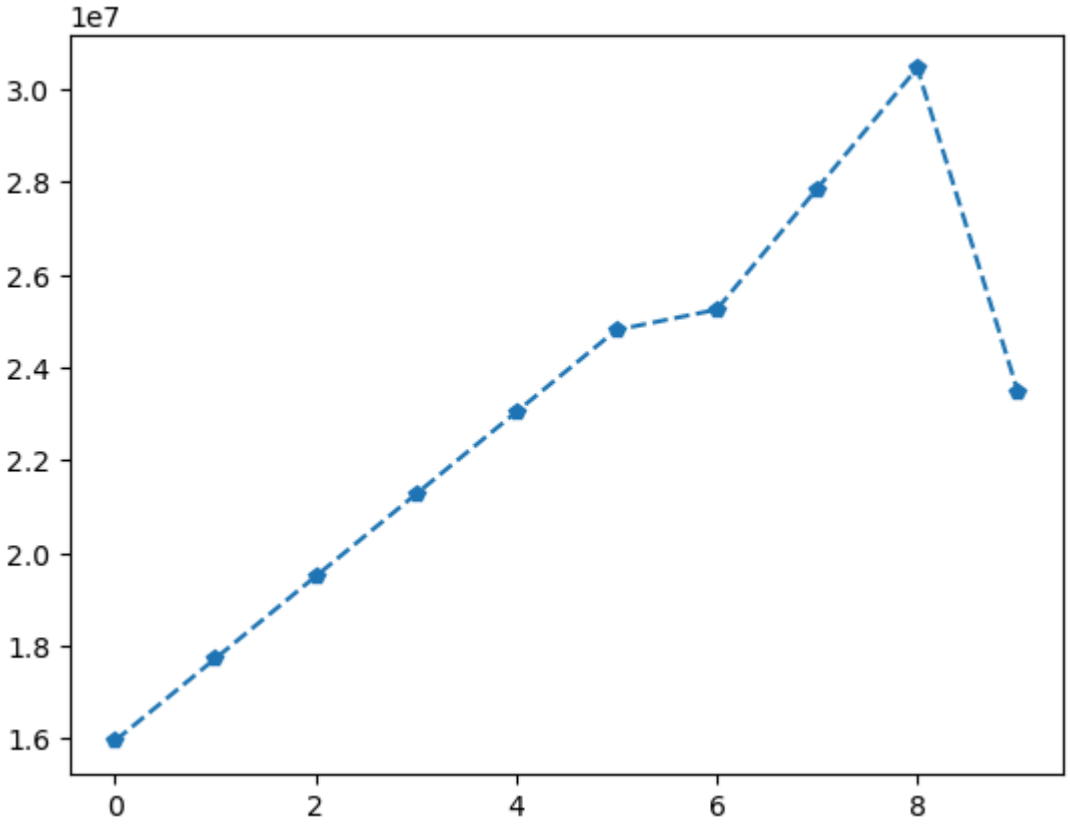
In [54]:
```
plt.plot(Salary[0],ls='--',marker='o')
```

Out[54]: [<matplotlib.lines.Line2D at 0x1ba53987a70>]



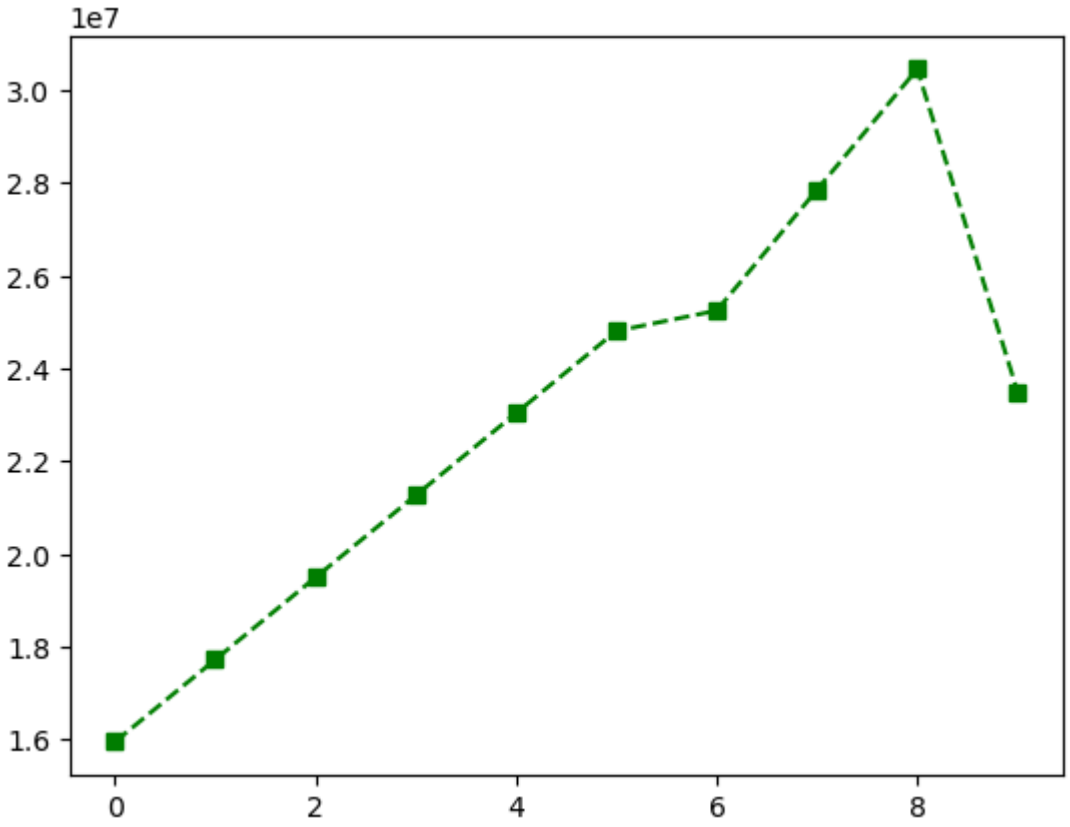
In [55]:
```
plt.plot(Salary[0],ls='--',marker='p')
```

Out[55]: [<matplotlib.lines.Line2D at 0x1ba53a30200>]



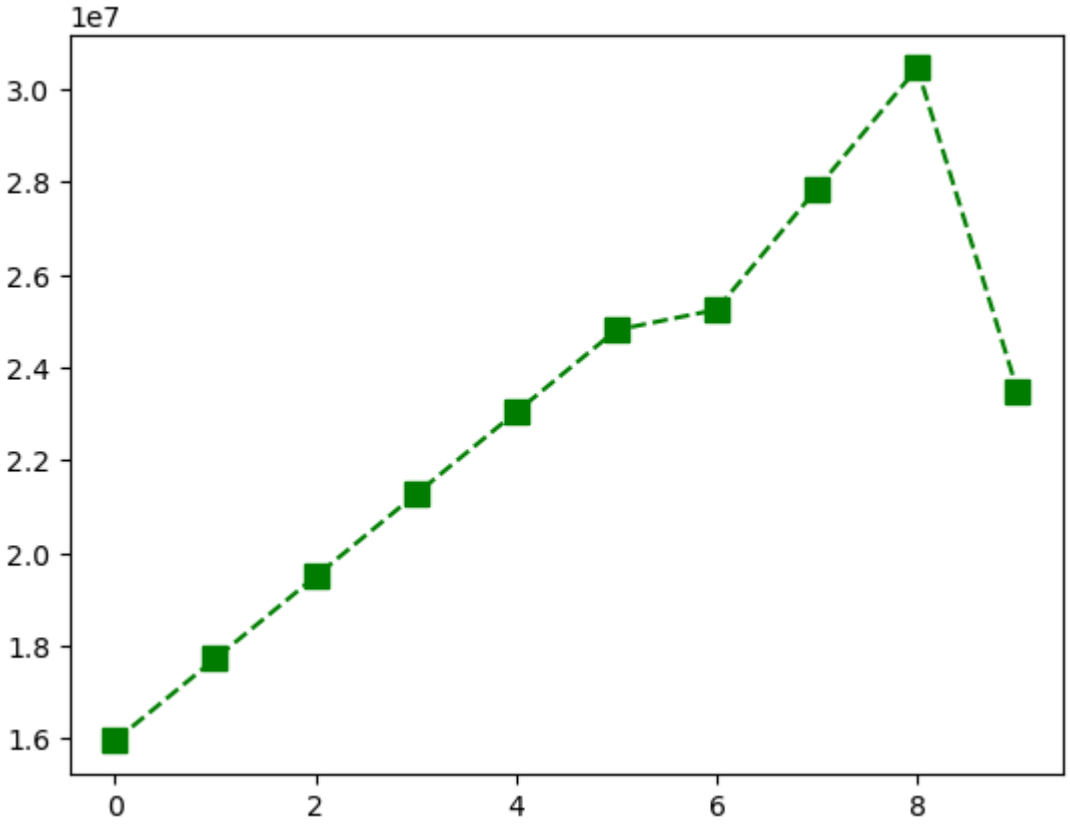
In [57]:
```
plt.plot(Salary[0],ls='--',color='green',marker='s')
```

Out[57]: [<matplotlib.lines.Line2D at 0x1ba53a94d10>]



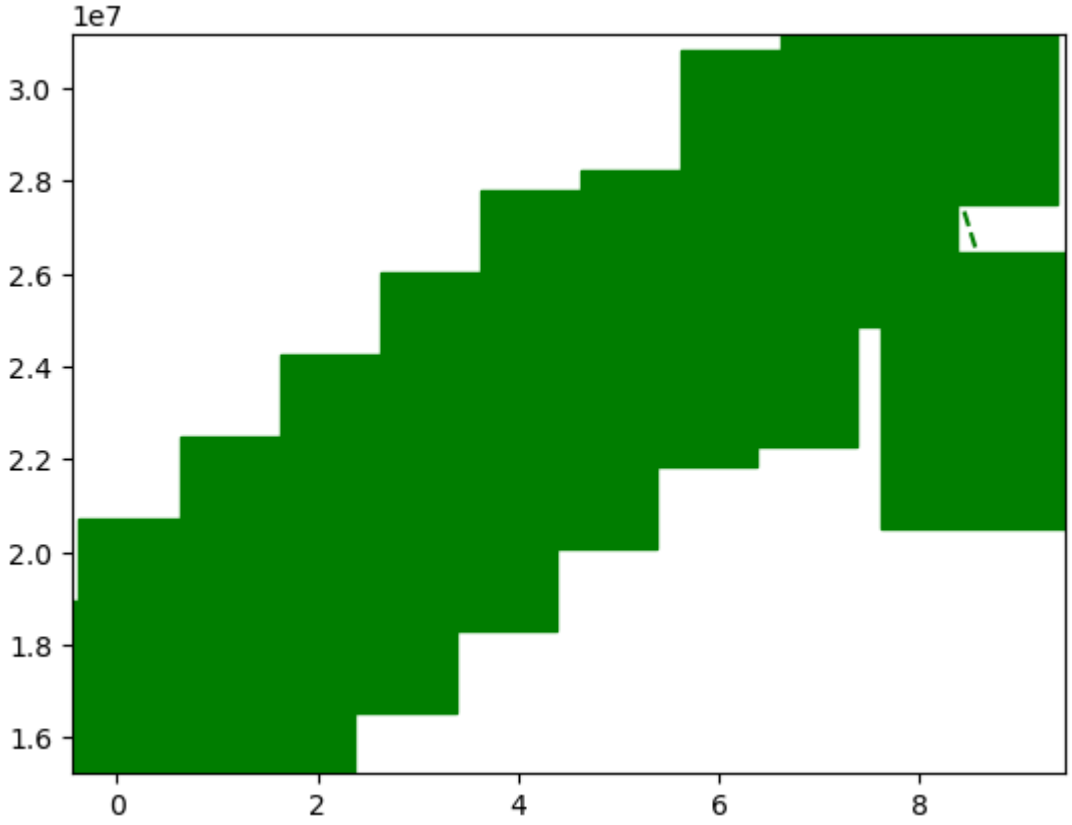
In [58]:
```
plt.plot(Salary[0],ls='--',color='green',marker='s',ms='8')
```

Out[58]: [<matplotlib.lines.Line2D at 0x1ba53af2180>]



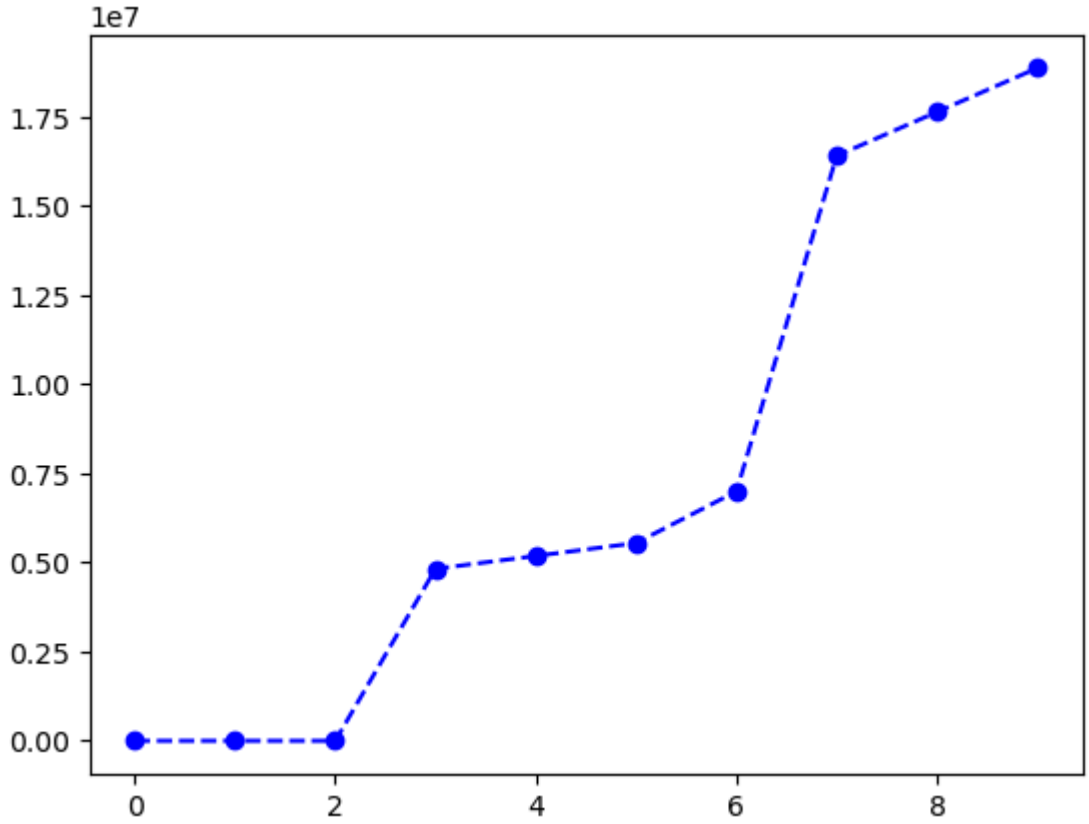
In [59]:
```
plt.plot(Salary[0],ls='--',color='green',marker='s',ms=100)
```

Out[59]: [<matplotlib.lines.Line2D at 0x1ba53b5a0f0>]



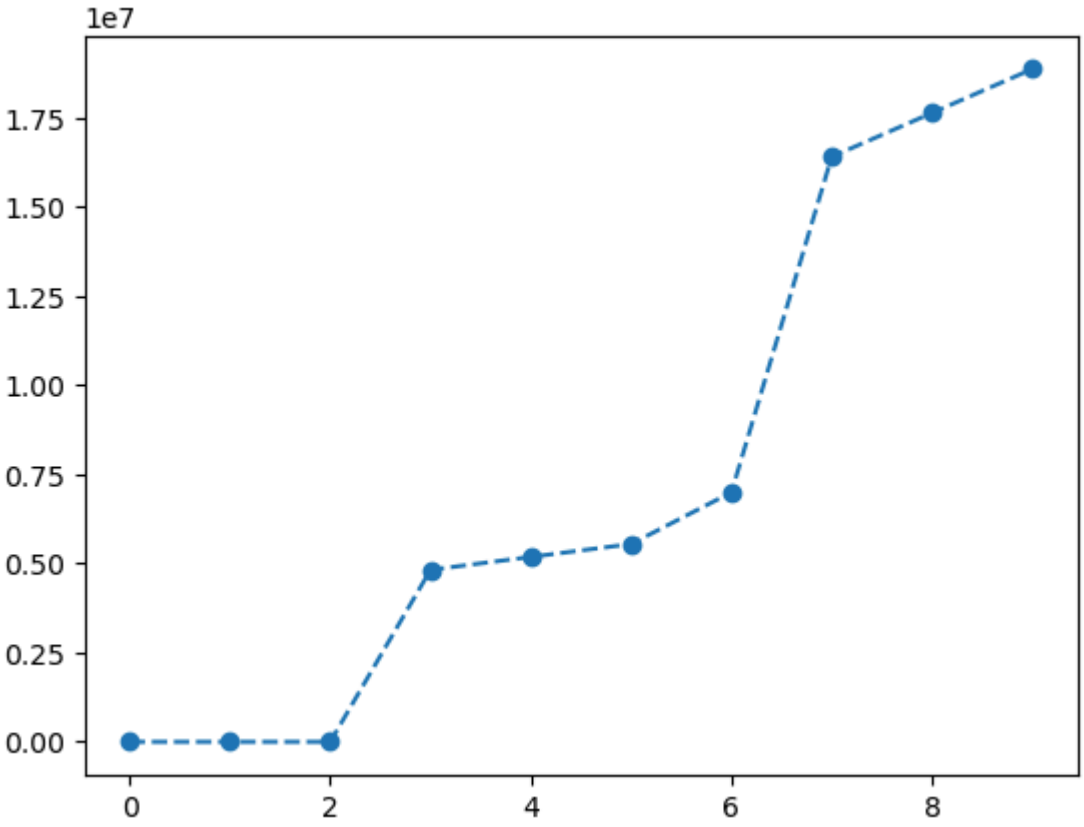
In [60]:
```
plt.plot(Salary[8],ls='--',color='blue',marker='o')
```

Out[60]: [<matplotlib.lines.Line2D at 0x1ba53cdf1a0>]



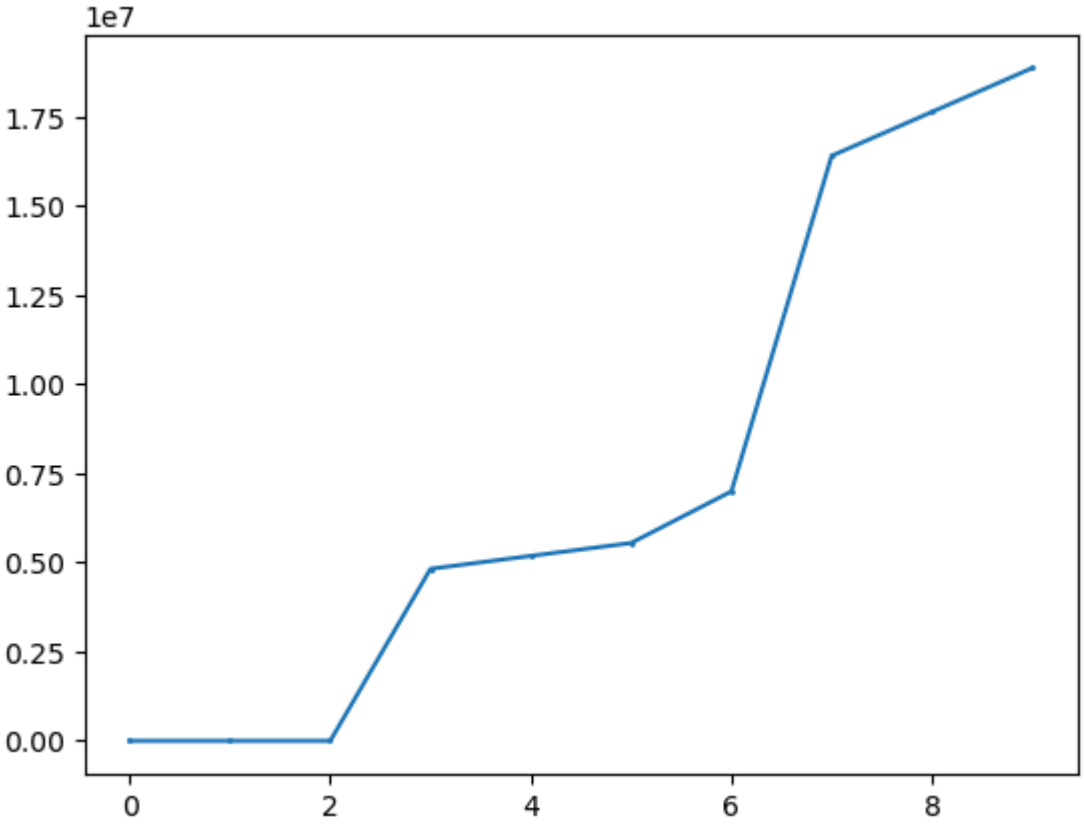
In [61]:
```
plt.plot(Salary[8],ls='--',marker='o')
```

Out[61]: [<matplotlib.lines.Line2D at 0x1ba53d4b680>]



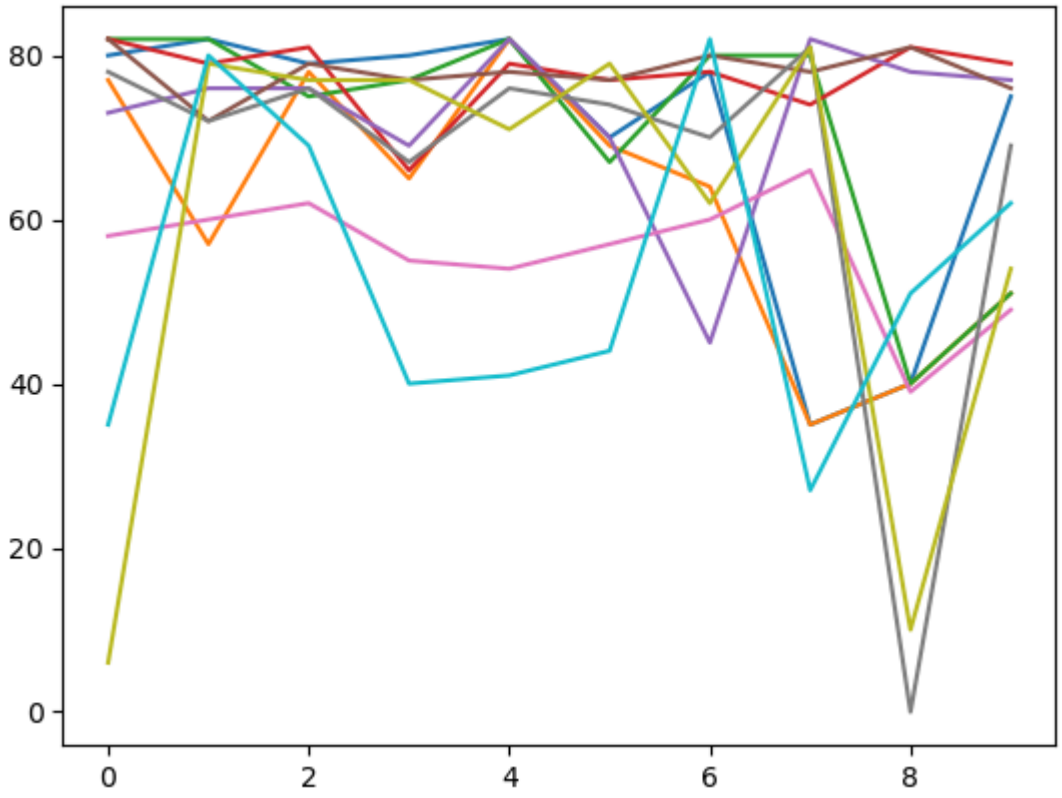
In [62]:
```
plt.plot(Salary[8],ls='-',marker='o',ms=1)
```

Out[62]: [<matplotlib.lines.Line2D at 0x1ba53bb4470>]



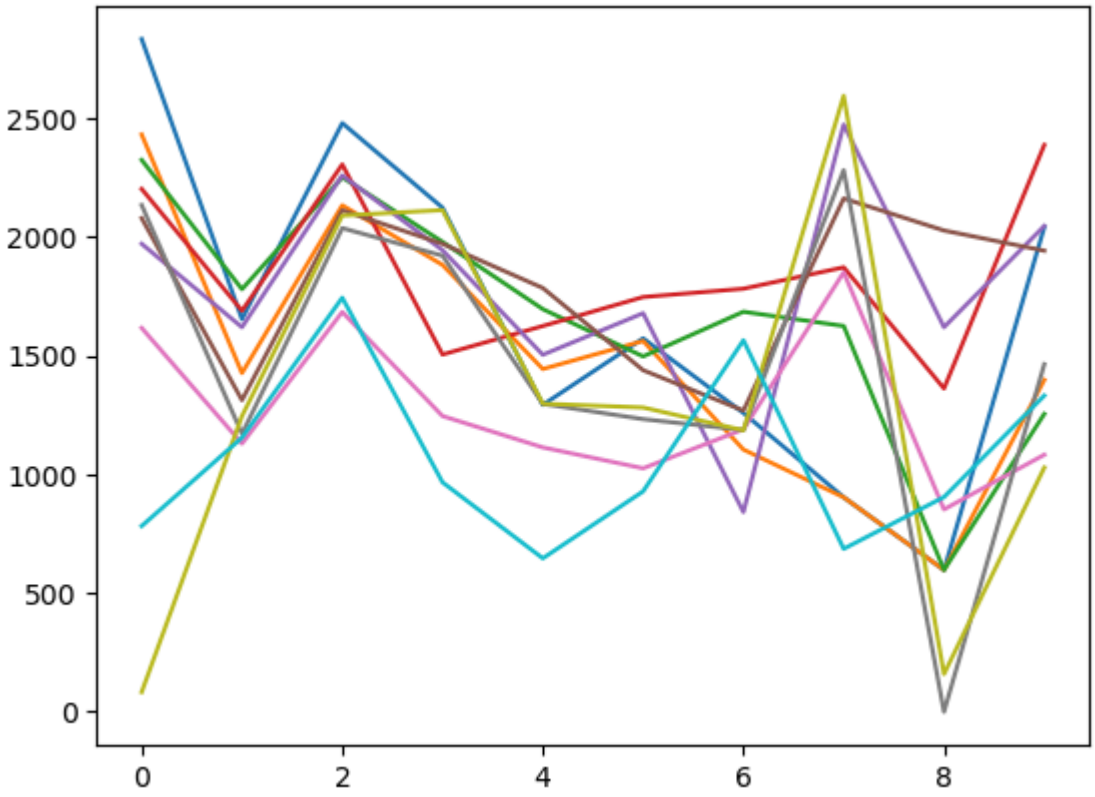
In [63]:
```
plt.plot(Games,ls='-')
```

Out[63]:
```
[<matplotlib.lines.Line2D at 0x1ba53c1c8c0>,
 <matplotlib.lines.Line2D at 0x1ba53c1c980>,
 <matplotlib.lines.Line2D at 0x1ba53c1ca70>,
 <matplotlib.lines.Line2D at 0x1ba53c1cb60>,
 <matplotlib.lines.Line2D at 0x1ba53c1cc20>,
 <matplotlib.lines.Line2D at 0x1ba53c1cd10>,
 <matplotlib.lines.Line2D at 0x1ba53c1ce00>,
 <matplotlib.lines.Line2D at 0x1ba53c1cef0>,
 <matplotlib.lines.Line2D at 0x1ba53c1cfe0>,
 <matplotlib.lines.Line2D at 0x1ba53c1d0d0>]
```



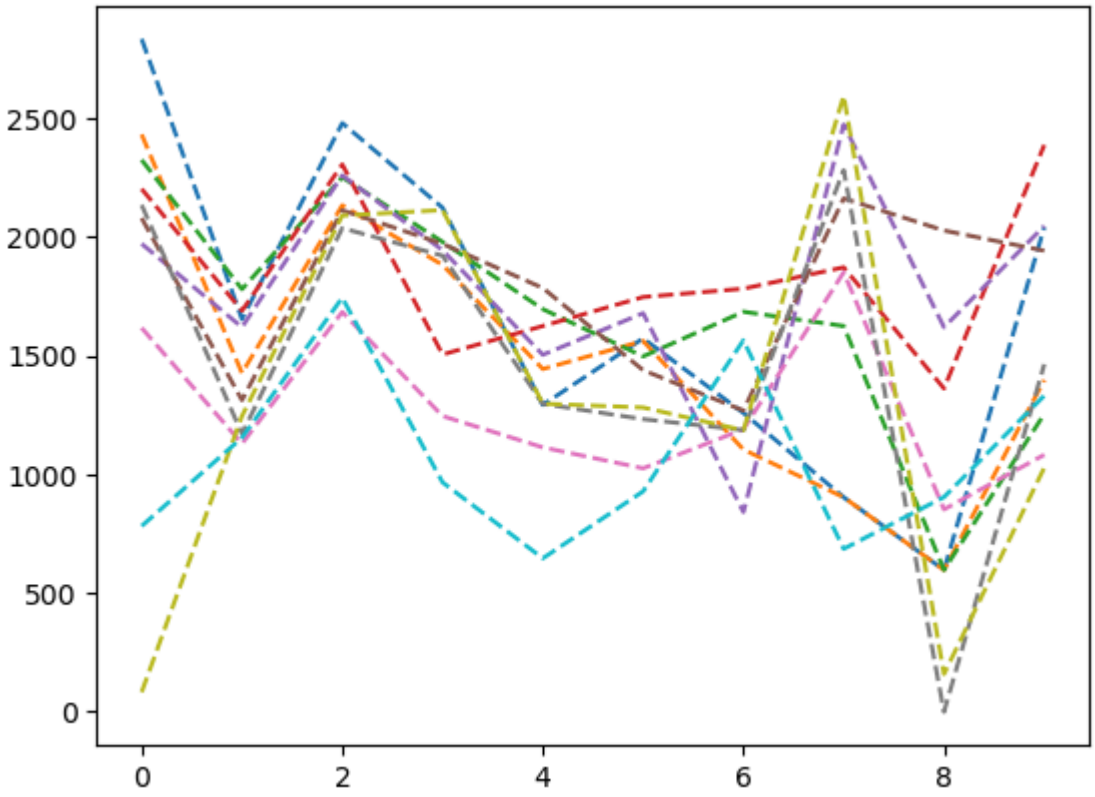
In [64]:
```
plt.plot(Points)
```

Out[64]:
```
[<matplotlib.lines.Line2D at 0x1ba53c818e0>,
 <matplotlib.lines.Line2D at 0x1ba53be5670>,
 <matplotlib.lines.Line2D at 0x1ba53c81910>,
 <matplotlib.lines.Line2D at 0x1ba53c81a60>,
 <matplotlib.lines.Line2D at 0x1ba53c81b50>,
 <matplotlib.lines.Line2D at 0x1ba53c1eea0>,
 <matplotlib.lines.Line2D at 0x1ba53c81c40>,
 <matplotlib.lines.Line2D at 0x1ba53c81dc0>,
 <matplotlib.lines.Line2D at 0x1ba53c81eb0>,
 <matplotlib.lines.Line2D at 0x1ba53c81fa0>]
```



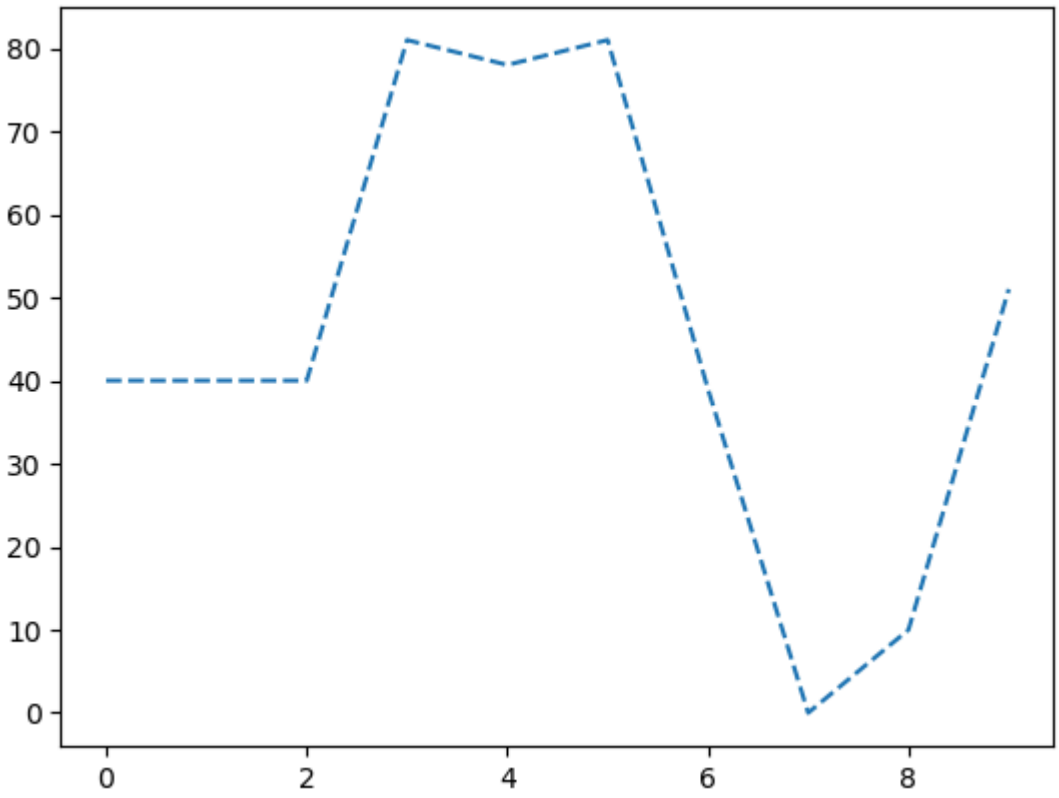
In [65]:
```
plt.plot(Points,ls='--')
```

Out[65]:
```
[<matplotlib.lines.Line2D at 0x1ba53e25d60>,
 <matplotlib.lines.Line2D at 0x1ba53e25e50>,
 <matplotlib.lines.Line2D at 0x1ba53e25f40>,
 <matplotlib.lines.Line2D at 0x1ba53e26000>,
 <matplotlib.lines.Line2D at 0x1ba53c593a0>,
 <matplotlib.lines.Line2D at 0x1ba53e26180>,
 <matplotlib.lines.Line2D at 0x1ba53e26270>,
 <matplotlib.lines.Line2D at 0x1ba53e26360>,
 <matplotlib.lines.Line2D at 0x1ba53e26450>,
 <matplotlib.lines.Line2D at 0x1ba53e26510>]
```

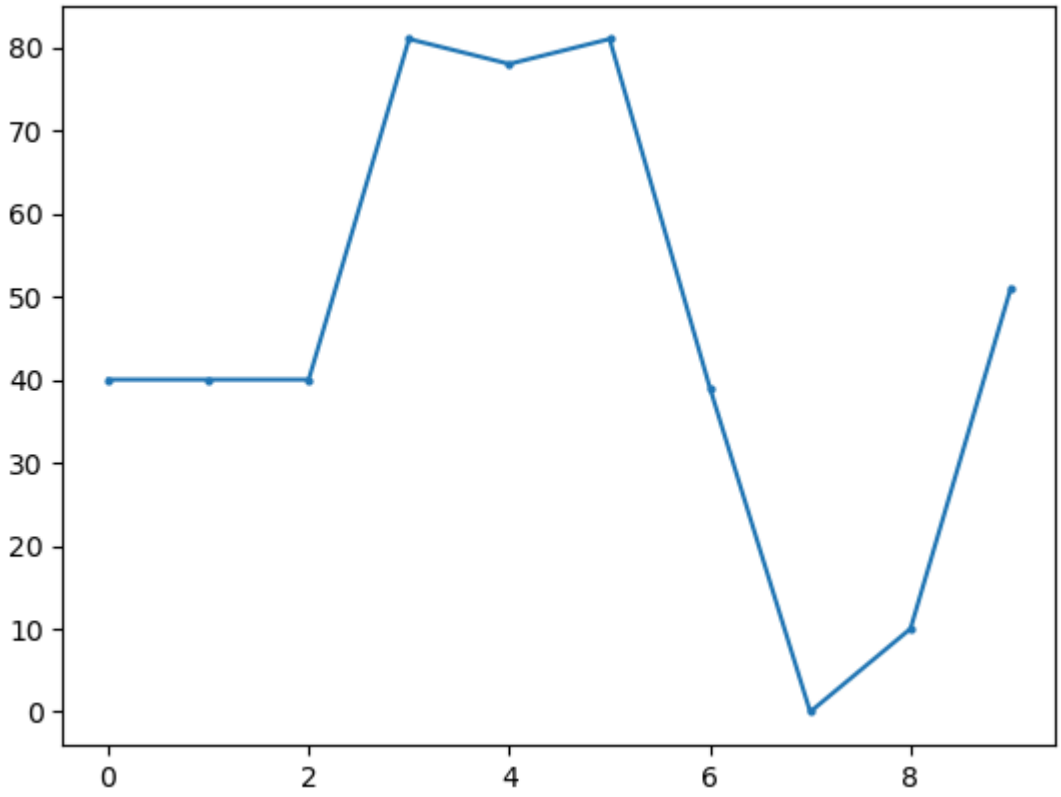


In [66]:
```
plt.plot(Games[8],ls='--')
```

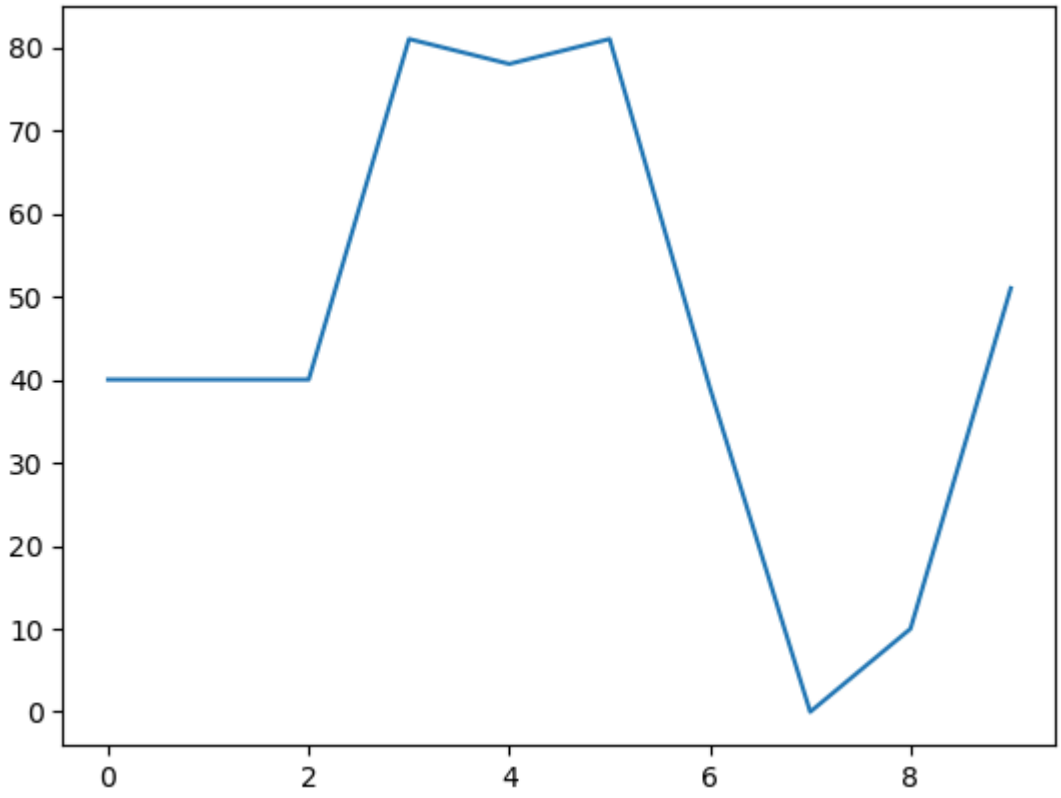
Out[66]:
```
[<matplotlib.lines.Line2D at 0x1ba53e9e120>]
```



In [68]:
```
plt.plot(Games[8],ls='-',marker='o',ms=2)
plt.show()
```

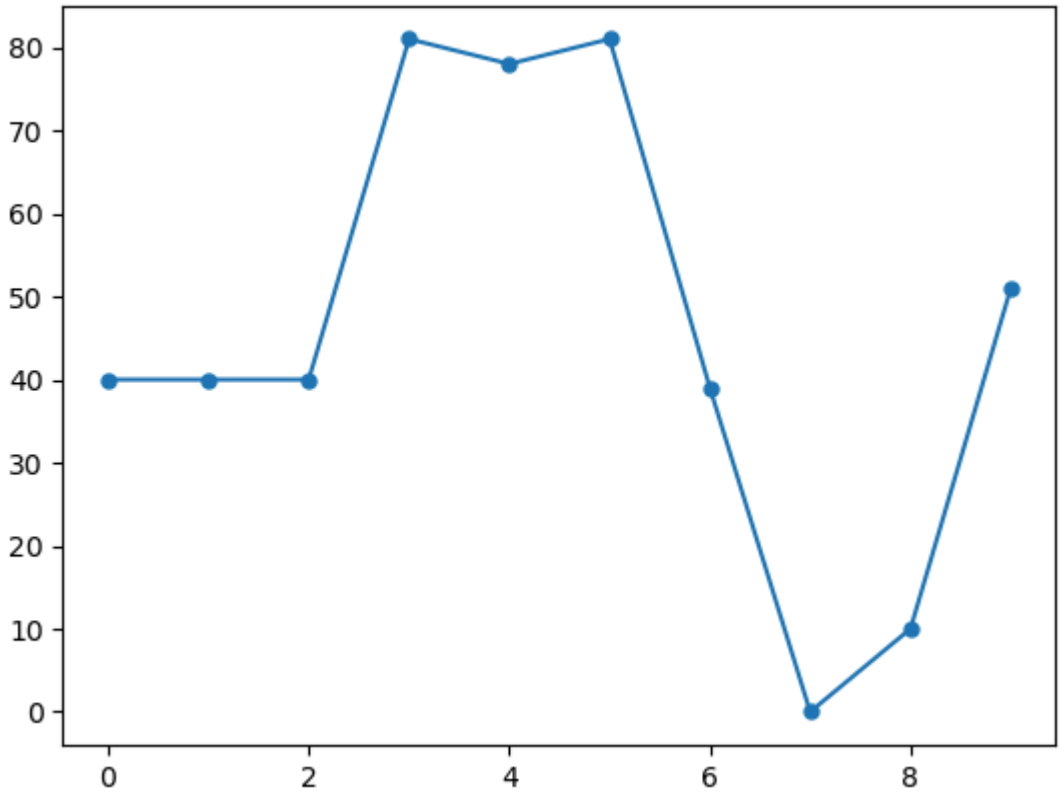


In [69]:
```
plt.plot(Games[8])
plt.show()
```



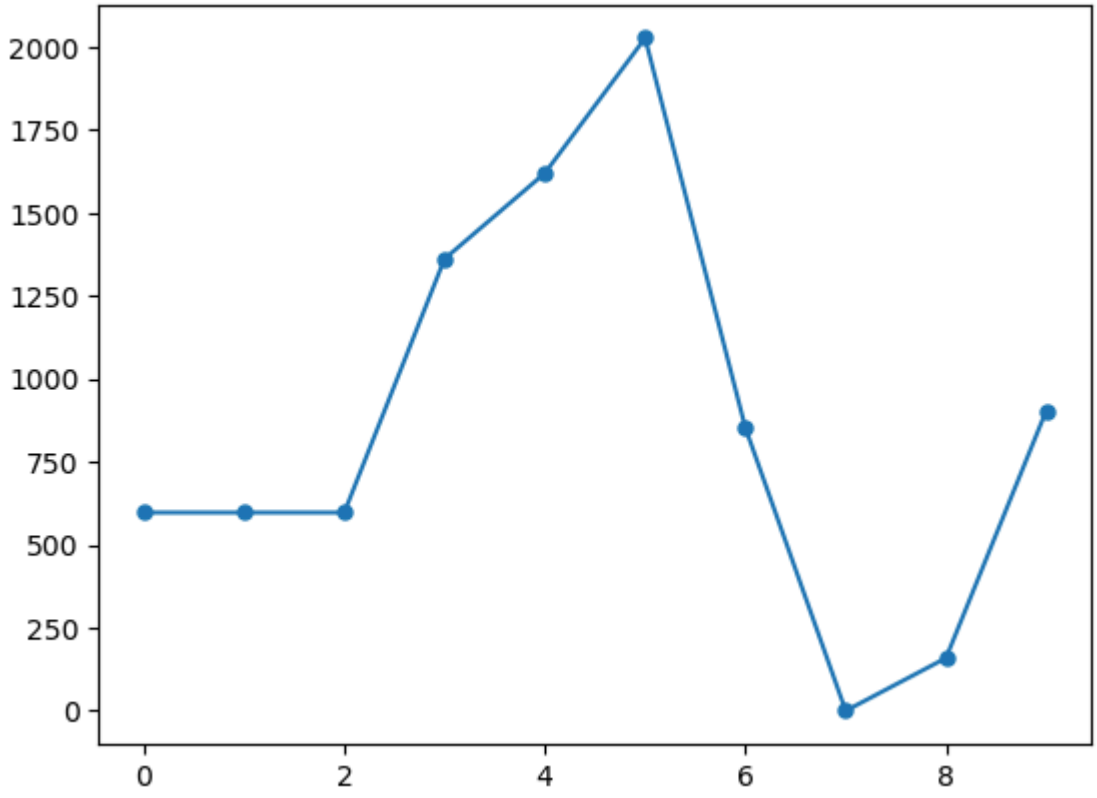
In [70]:
```
plt.plot(Games[8],ls='-',marker='o',ms=5)
```

Out[70]:
```
[<matplotlib.lines.Line2D at 0x1ba55109220>]
```



In [71]:
```
plt.plot(Points[8],ls='-',marker='o',ms=5)
```

Out[71]:
```
[<matplotlib.lines.Line2D at 0x1ba5514ea50>]
```



In [ ]: