

In [3]: Salary

```
Out[3]: 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 [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
```

```
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],
   [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 [8]: Games[0,6]
```

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

```
In [9]: Salary
```

```
Out[9]: 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 [10]: Games

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

```
C:\Users\komme\AppData\Local\Temp\ipykernel_9284\1572766764.py:1: RuntimeWarning:
divide by zero encountered in divide
Salary / Games
```

```
Out[11]: 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.        ,      0.        ,
  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 [12]: np.round(Salary // Games)
```

```
C:\Users\komme\AppData\Local\Temp\ipykernel_9284\2034936389.py:1: RuntimeWarning:
divide by zero encountered in floor_divide
np.round(Salary // Games)
```

```
Out[12]: 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 [14]: import warnings
warnings.filterwarnings('ignore')
```

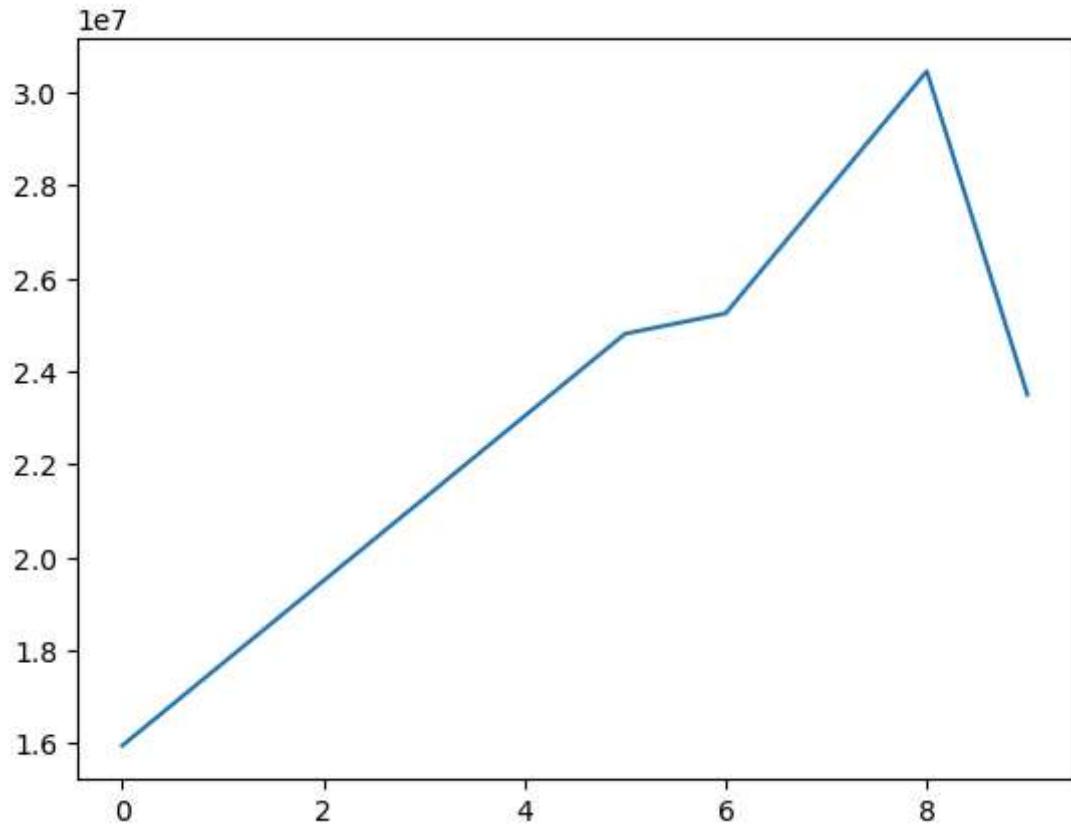
```
In [15]: import matplotlib.pyplot as plt
import numpy as np
```

```
In [16]: Salary[0]
```

```
Out[16]: array([15946875, 17718750, 19490625, 21262500, 23034375, 24806250,
 25244493, 27849149, 30453805, 23500000])
```

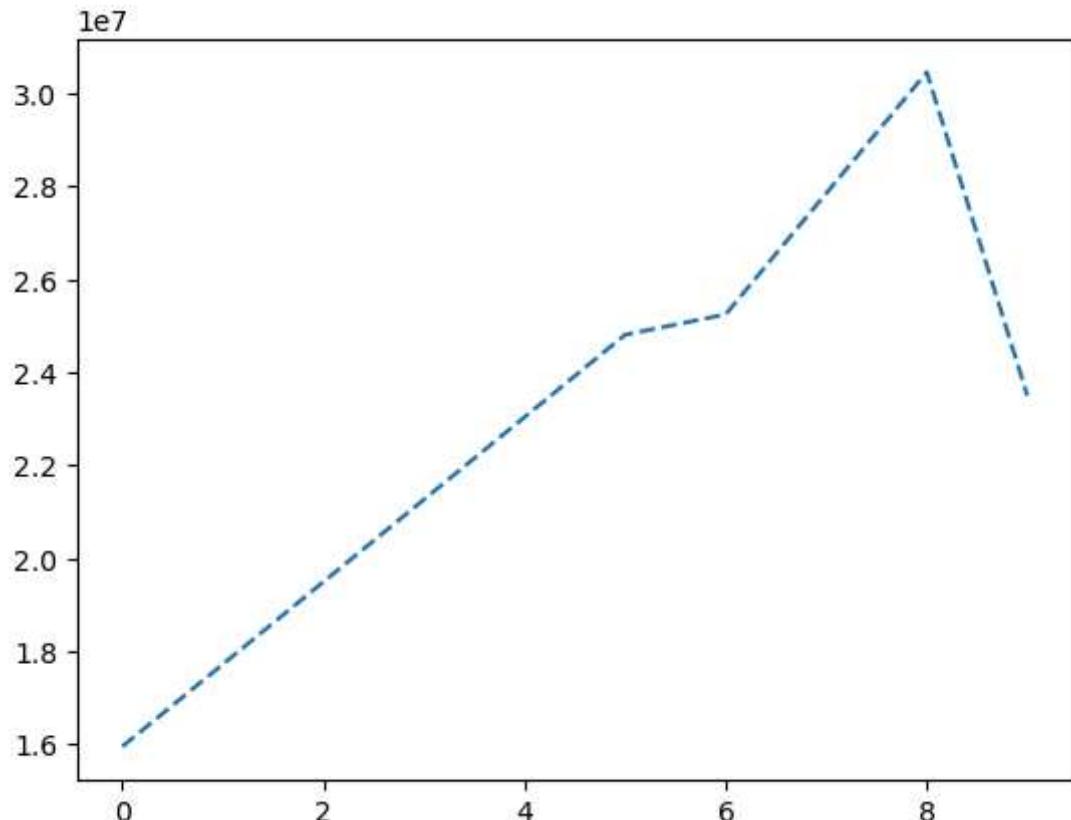
```
In [20]: plt.plot(Salary[0])
#plt.show()
```

```
Out[20]: [<matplotlib.lines.Line2D at 0x1e280080650>]
```



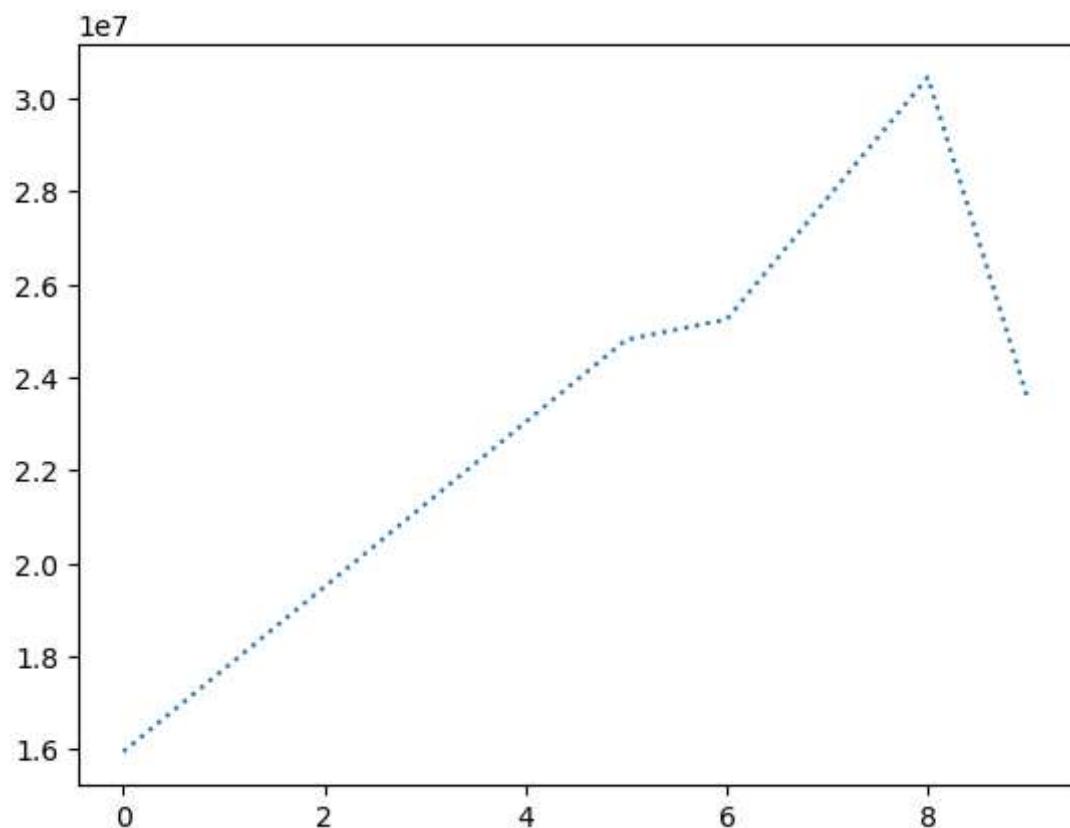
```
In [21]: plt.plot(Salary[0],ls = '--')
```

```
Out[21]: [<matplotlib.lines.Line2D at 0x1e2800ed0a0>]
```



```
In [23]: plt.plot(Salary[0],ls = ':')
```

```
Out[23]: [<matplotlib.lines.Line2D at 0x1e280287290>]
```



```
In [24]: plt.plot(Salary[0],ls ='.')
```

```

-----
ValueError                                     Traceback (most recent call last)

Cell In[24], line 1
----> 1 plt.plot(Salary[0],ls ='.')
      2
      3 File ~\anaconda3\Lib\site-packages\matplotlib\pyplot.py:3794, in plot(scaledx, scaledy, 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         scaledx=scaledx,
      3797         scaledy=scaledy,
      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(self, scaledx, scaledy, 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

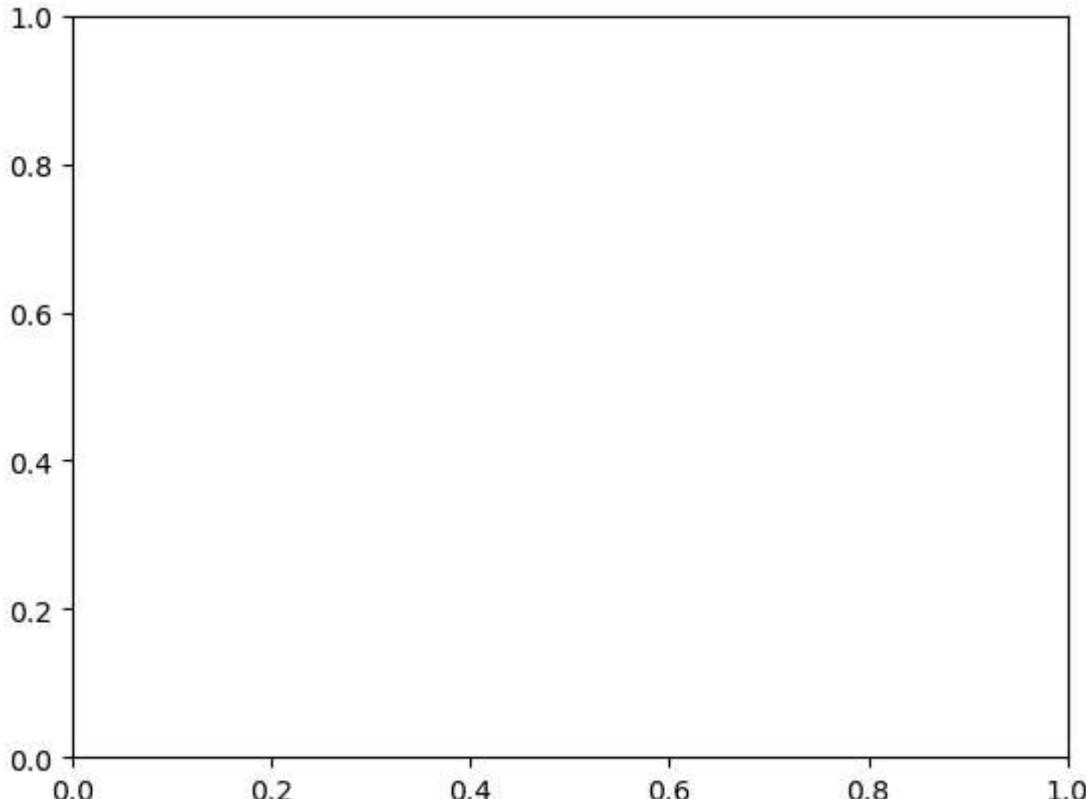
File ~\anaconda3\Lib\site-packages\matplotlib\lines.py:372, in Line2D.__init__(self, xdata, ydata, linewidth, linestyle, color, gapcolor, marker, markersize, markeredgewidth, markeredgecolor, markerfacecolor, markerfacecoloralt, fillstyle, antialiased, dash_capstyle, solid_capstyle, dash_joinstyle, solid_joinstyle, pickradius, drawstyle, markevery, **kwargs)
    369 self._dash_pattern = (0, None) # offset, dash (scaled by linewidth)
    370 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)

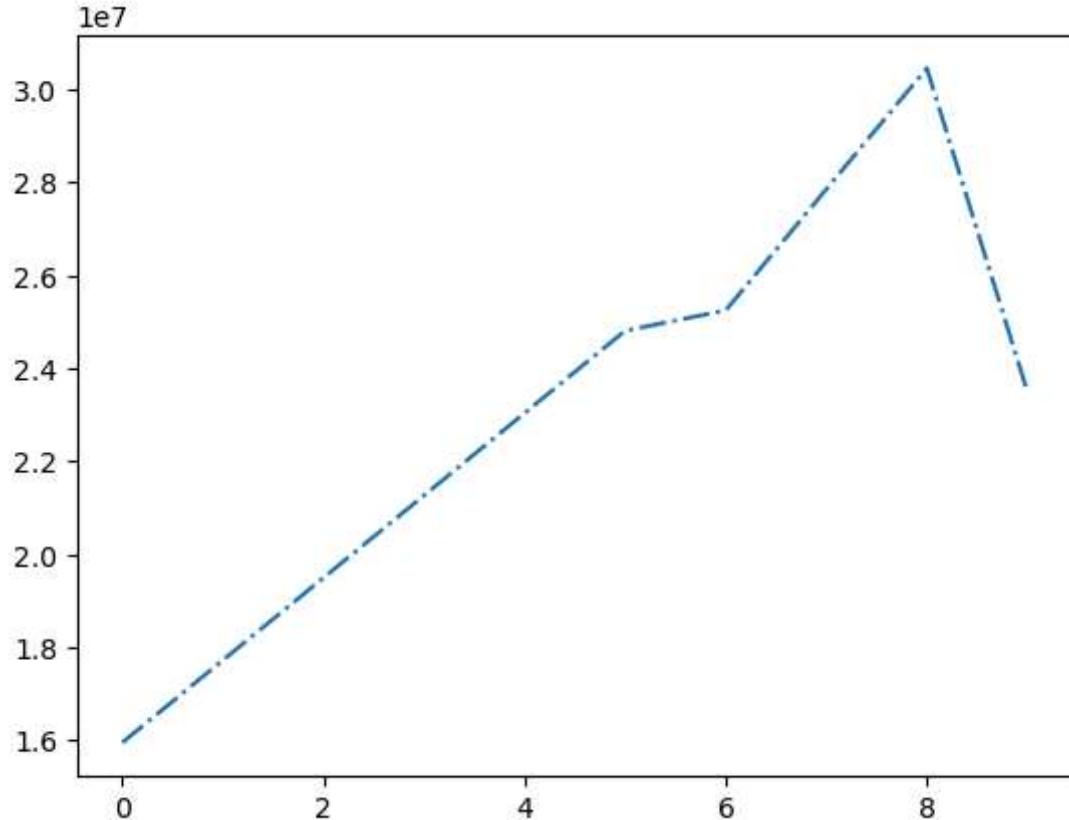
ValueError: '.' is not a valid value for ls; supported values are '-', '--', '-.', ':', 'None', ' ', '', 'solid', 'dashed', 'dashdot', 'dotted'

```



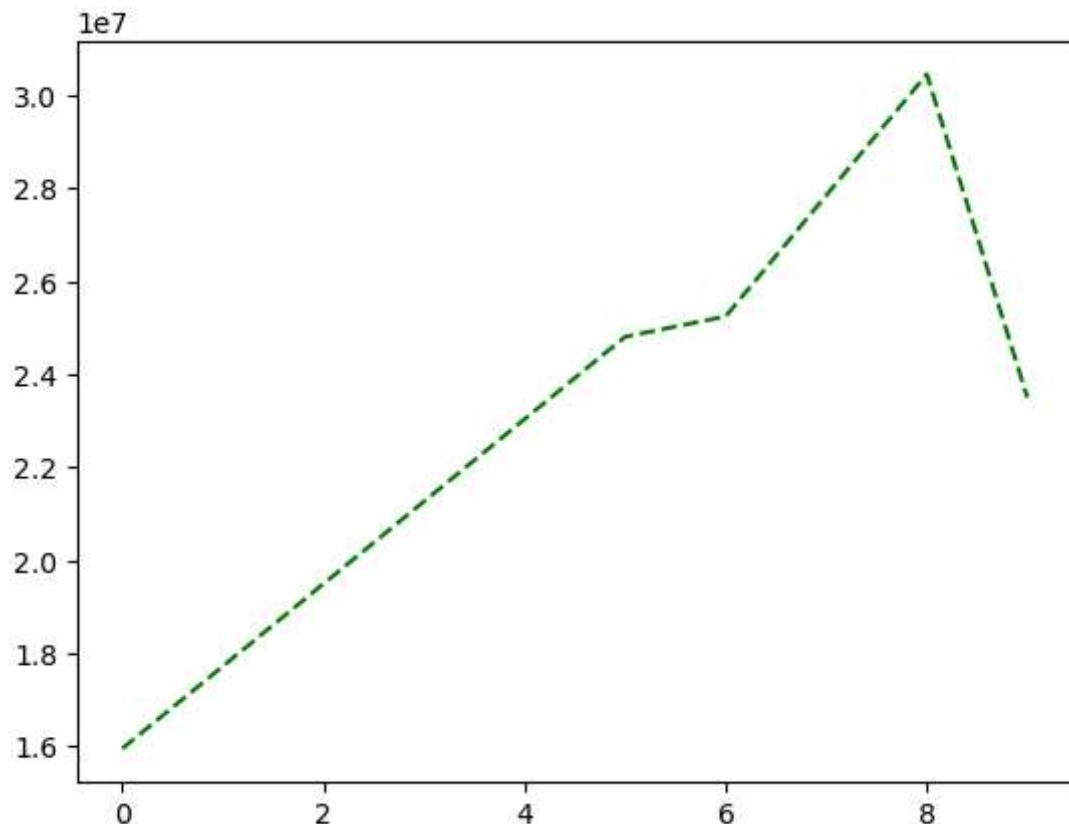
In [25]: plt.plot(Salary[0], ls ='-.')

```
Out[25]: <matplotlib.lines.Line2D at 0x1e285187620>
```



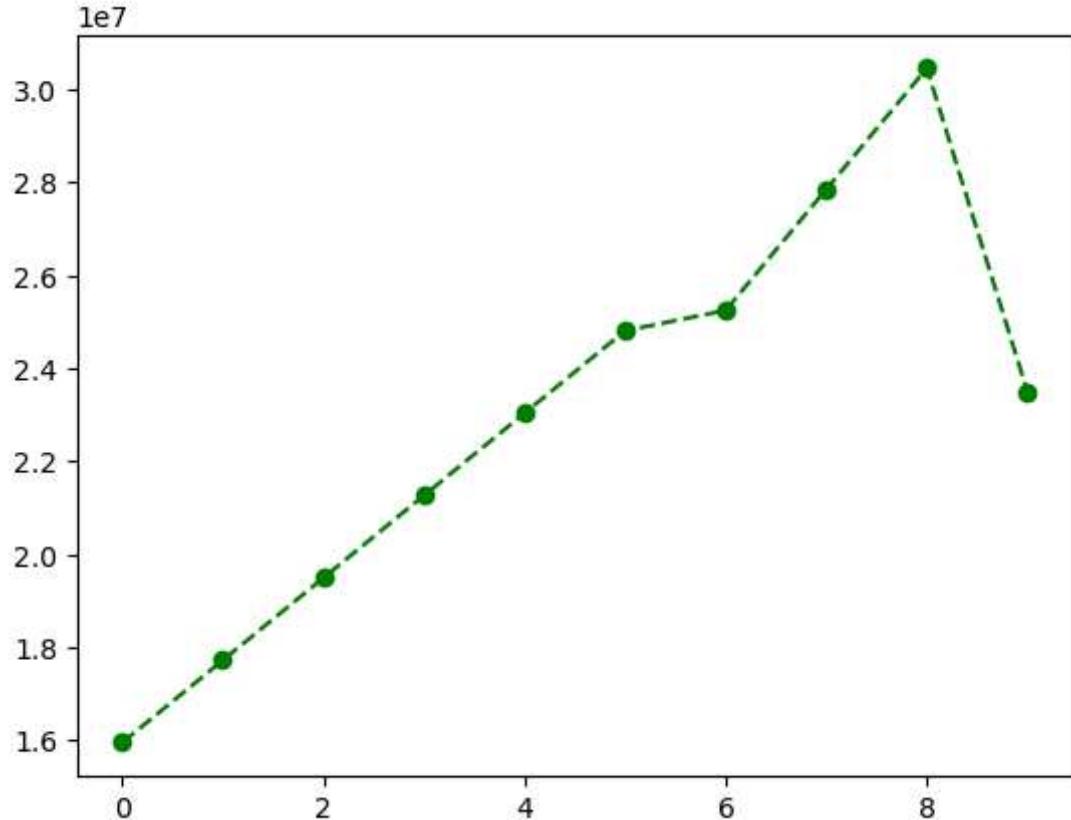
```
In [28]: plt.plot(Salary[0], ls = '--', color = 'green')
```

```
Out[28]: <matplotlib.lines.Line2D at 0x1e285cb93a0>
```



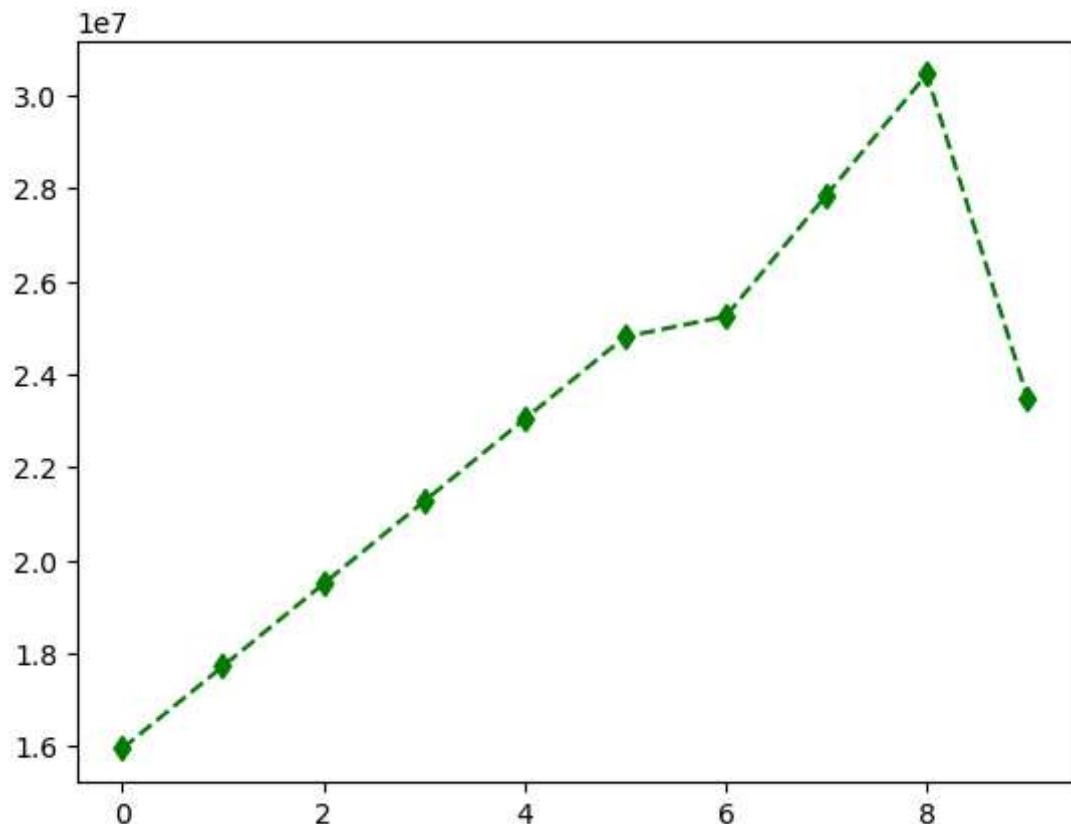
```
In [29]: plt.plot(Salary[0], ls = '--', color = 'green', marker = 'o')
```

```
Out[29]: <matplotlib.lines.Line2D at 0x1e285d0aba0>
```

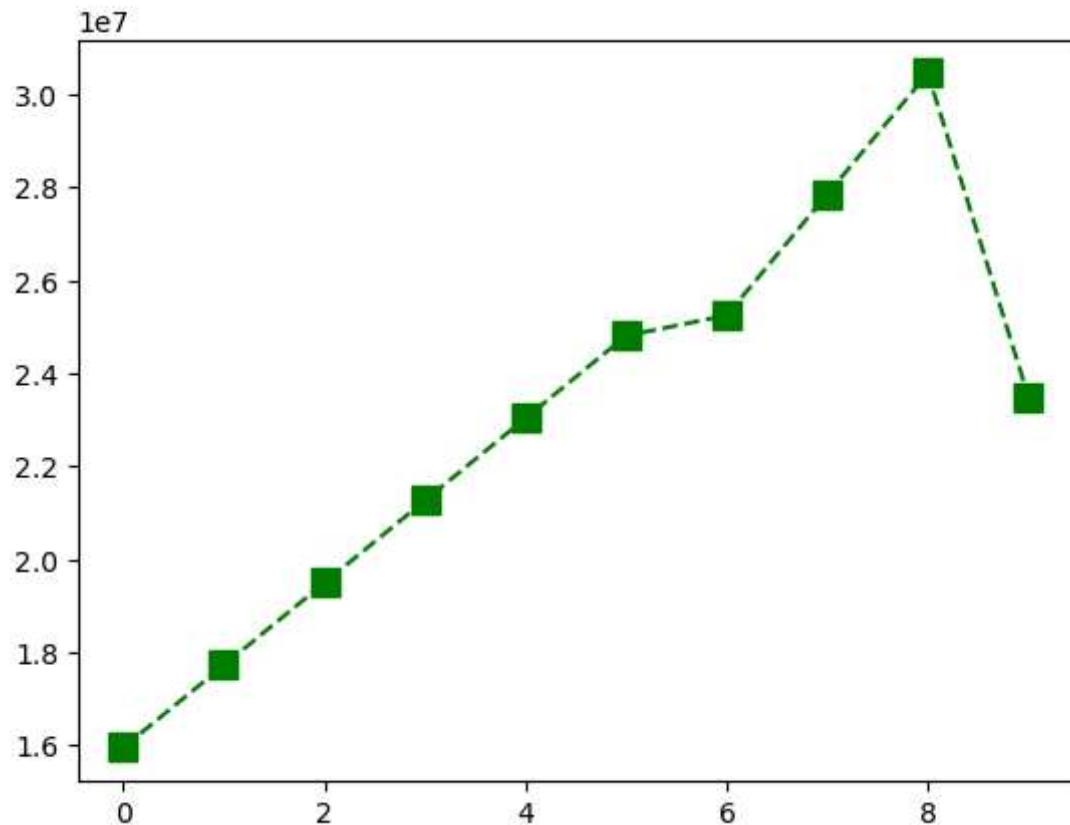


```
In [30]: plt.plot(Salary[0], ls = '--', color = 'green', marker = 'd')    #marker is showing
```

```
Out[30]: <matplotlib.lines.Line2D at 0x1e285d6b5f0>
```



```
In [32]: plt.plot(Salary[0], ls = '--', color = 'green', marker = 's', ms = 10)    #ms = ch
```

Out[32]: [`<matplotlib.lines.Line2D at 0x1e285e61550>`]

In []: