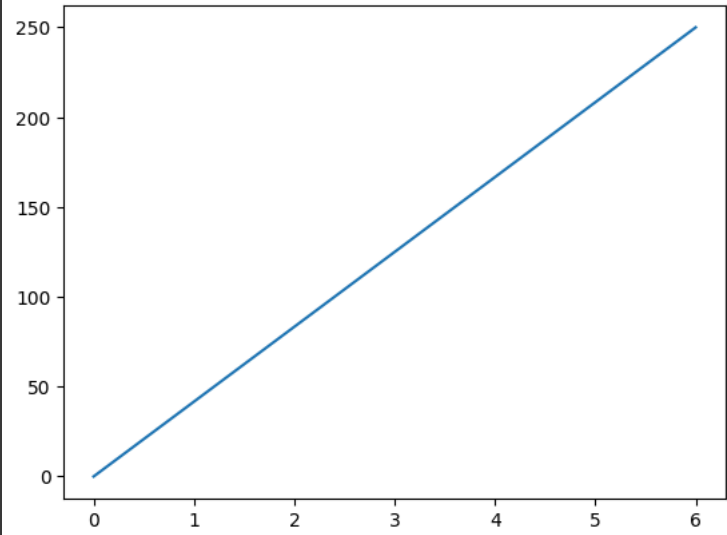
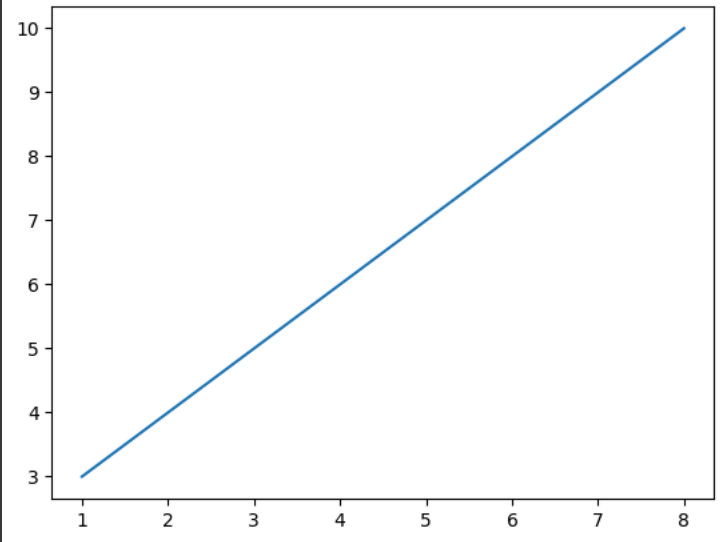


```
import matplotlib.pyplot as plt
import numpy as np
```

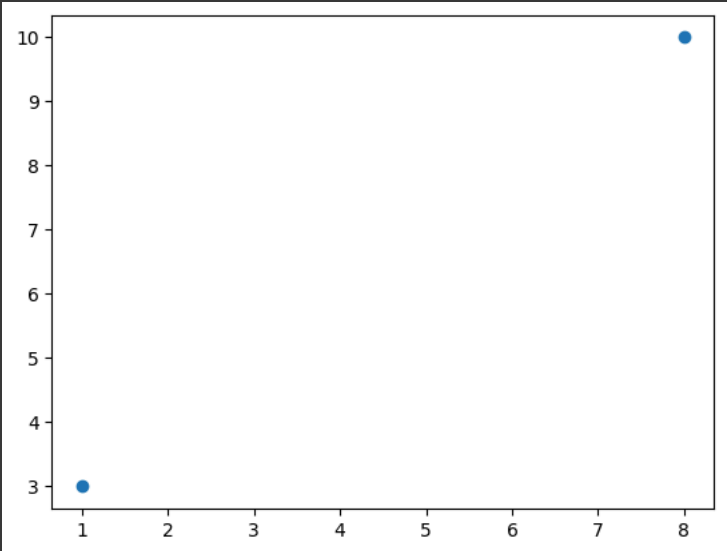
```
#line from (0,0) to (6,250)
xp = np.array([0,6])
yp = np.array([0,250])
plt.plot(xp,yp)
plt.show()
```



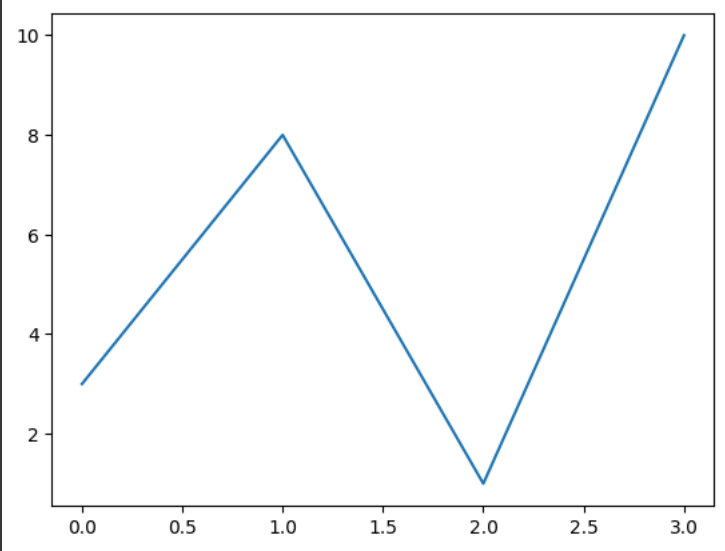
```
#line from (1,3) to (8,10)
xp = np.array([1,8])
yp = np.array([3,10])
plt.plot(xp,yp)
plt.show()
```



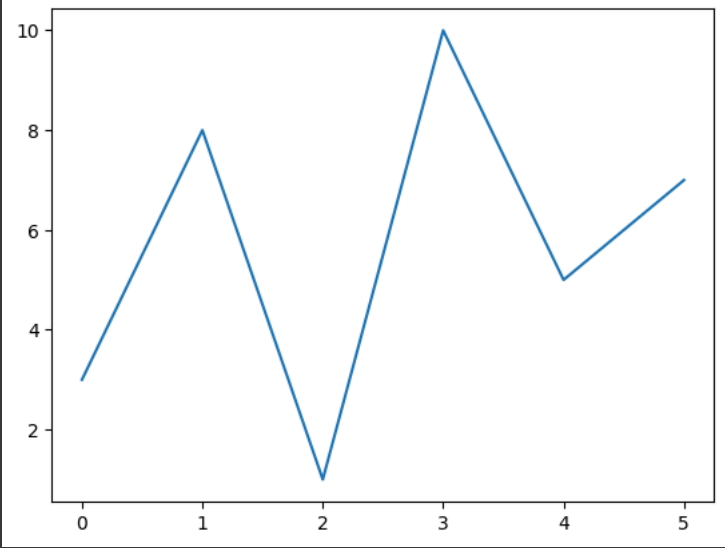
```
#plotting without a line
plt.plot(xp,yp,'o')
plt.show()
```



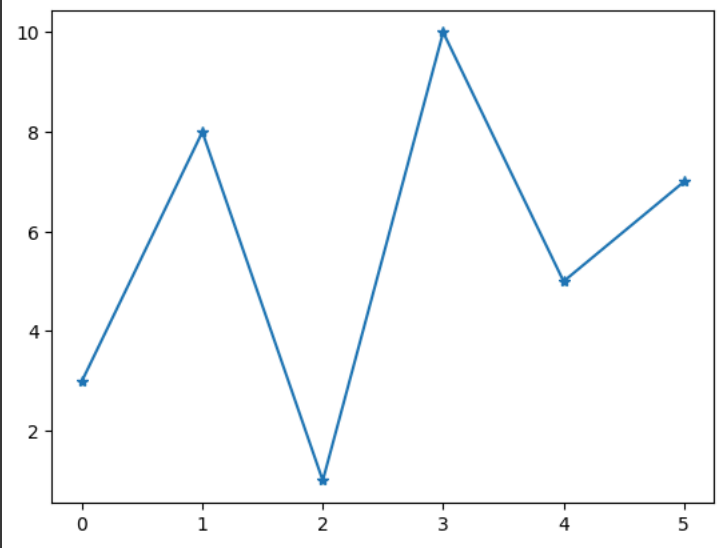
```
#line comprising multiple points
x = np.array([1,2,6,8])
y = np.array([3,8,1,10])
plt.plot(x)
plt.show()
```



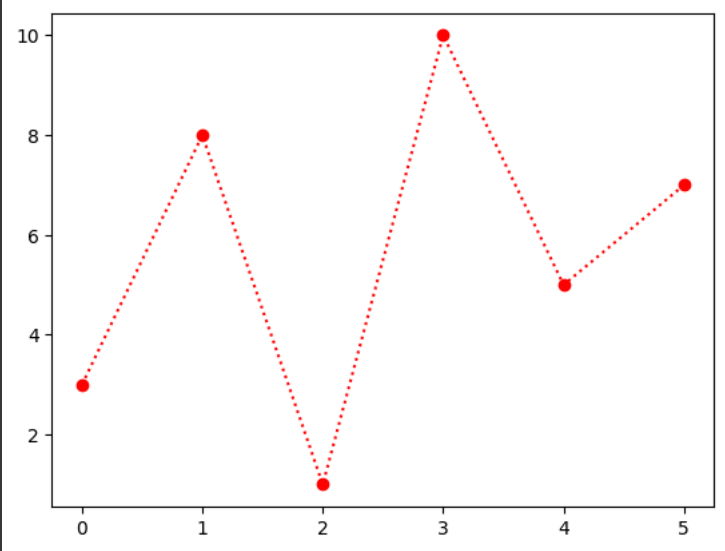
```
#plotting without x points
y=np.array([3,8,1,10,5,7])
plt.plot(y)
plt.show()
```



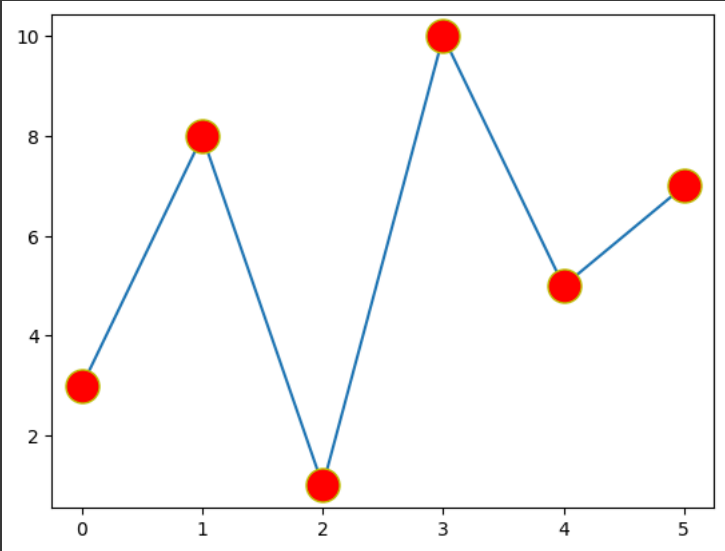
```
#matplotlib marker
plt.plot(y, marker = "*")
plt.show()
```



```
#format strings
plt.plot(y,'o:r')
plt.show()
```



```
#marker size & marker color & face color
plt.plot(y,marker='o',ms=18, mec='y', mfc='r')
plt.show()
```

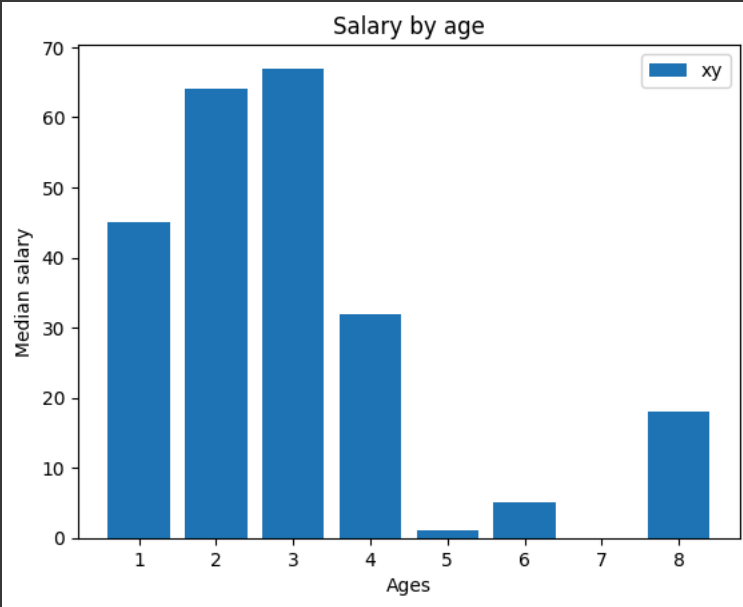


BAR CHART

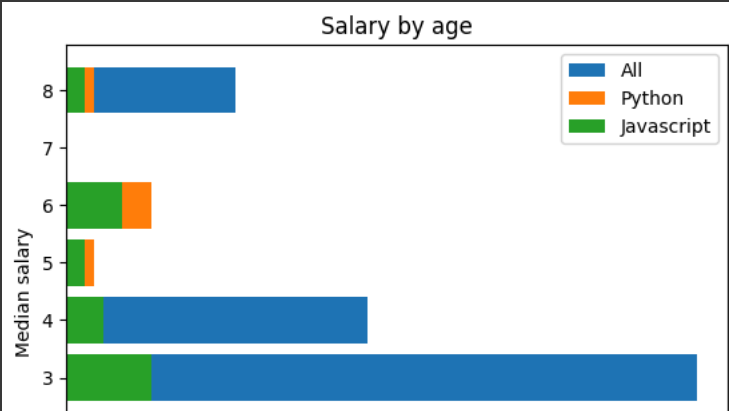
```
import pandas as pd
import matplotlib.pyplot as plt
```

```
x = [8,1,2,3,4,5,6]
y = [18,45,64,67,32,1,5]
```

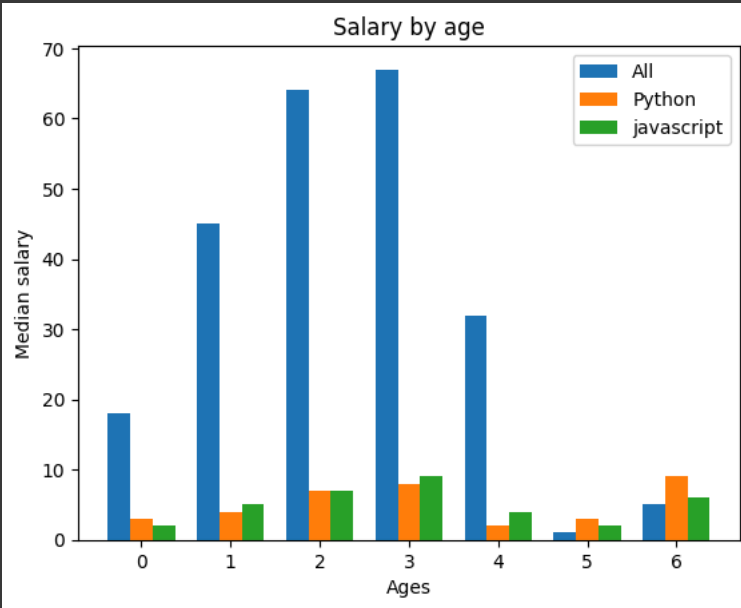
```
#plotting bar plot
plt.bar(x,y,label='xy')
plt.xlabel("Ages")
plt.ylabel("Median salary")
plt.title("Salary by age")
plt.legend()
plt.show()
```



```
#adding more bars to the same plot
py = [3,4,7,8,2,3,9]
js = [2,5,7,9,4,2,6]
plt.barh(x,y,label='All')
plt.barh(x,py,label='Python')
plt.barh(x,js,label='Javascript')
plt.xlabel("Ages")
plt.ylabel("Median salary")
plt.title("Salary by age")
plt.legend()
plt.show()
```



```
#adjusting width of plot
x_indexes=np.arange(len(x))
width = 0.25
plt.bar(x_indexes - width,y, width=width,label='All' )
plt.bar(x_indexes,py, width=width,label='Python')
plt.bar(x_indexes + width,js, width=width,label='javascript' )
plt.xlabel("Ages")
plt.ylabel("Median salary")
plt.title("Salary by age")
plt.legend()
plt.show()
```



```
#changing the x labels
plt.xticks(ticks=x_indexes, labels=x)
plt.bar(x_indexes - width,y, width=width,label='All' )
plt.bar(x_indexes,py, width=width,label='Python')
plt.bar(x_indexes + width,js, width=width,label='javascript' )
plt.xlabel("Ages")
plt.ylabel("Median salary")
plt.title("Salary by age")
plt.legend()
plt.show()
```

