In [1]:
```python
import numpy as np
import matplotlib.pyplot as plt
```
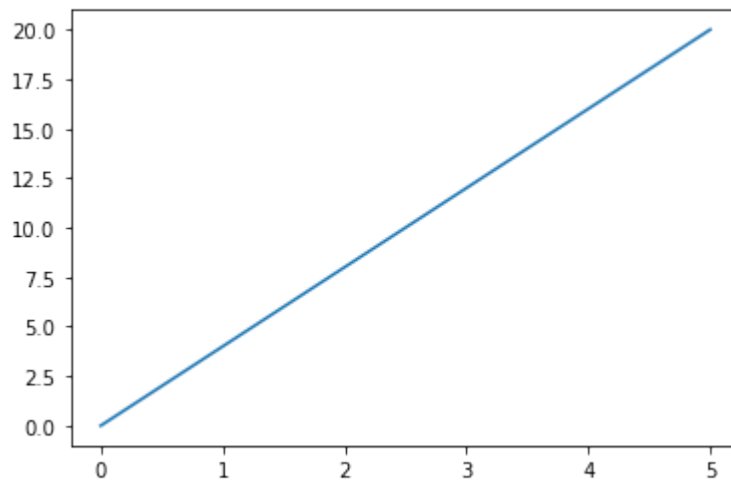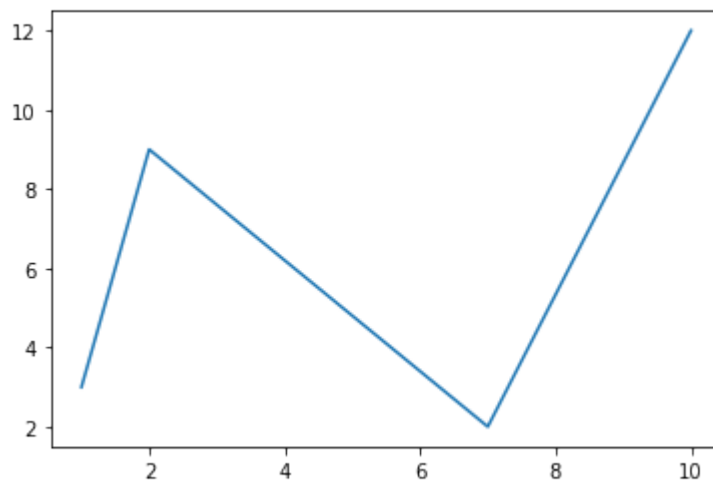
In [9]:
```python
plt.plot([0,5],[0,20])
plt.show()
```
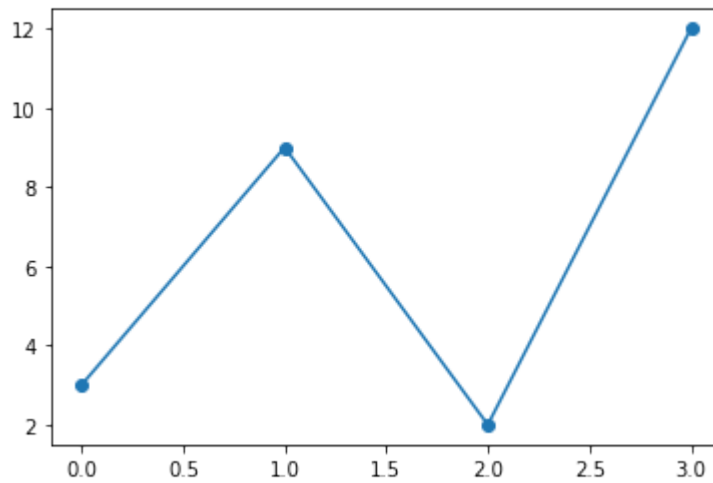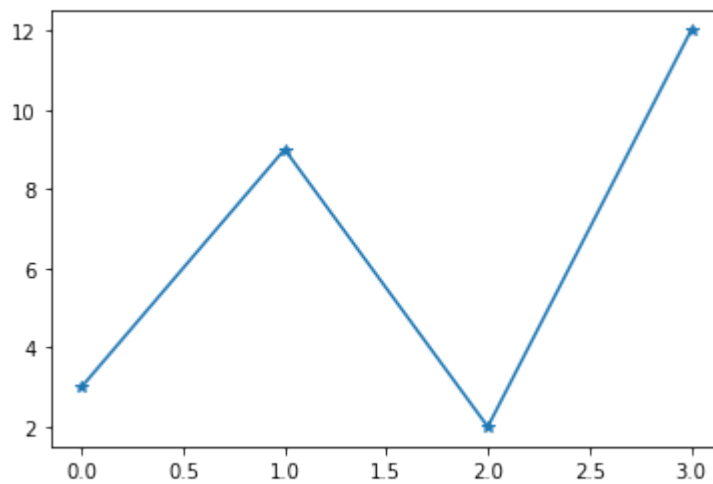

In [10]:
```python
plt.plot([1,2,7,10],[3,9,2,12])
plt.show()
```
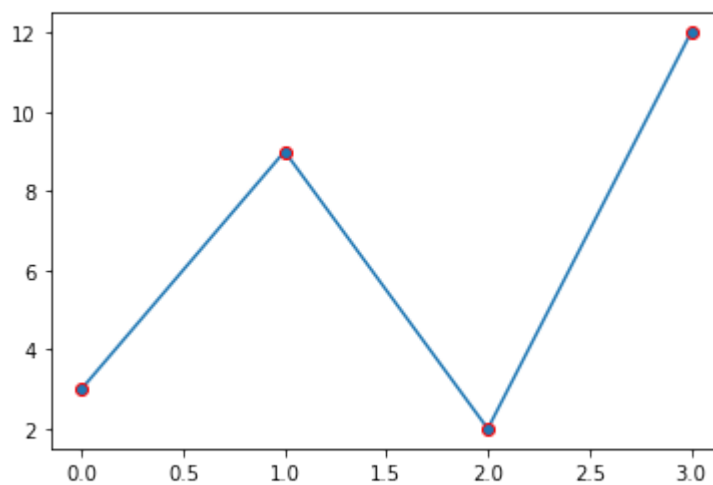
In [7]:
```python
plt.plot([3,9,2,12],marker= 'o')
plt.show()
```


In [13]:
```python
plt.plot([3,9,2,12],marker= '*')
plt.show()
```
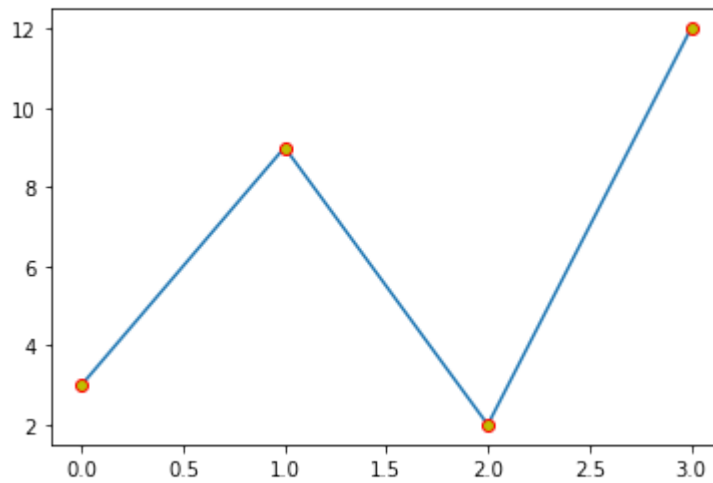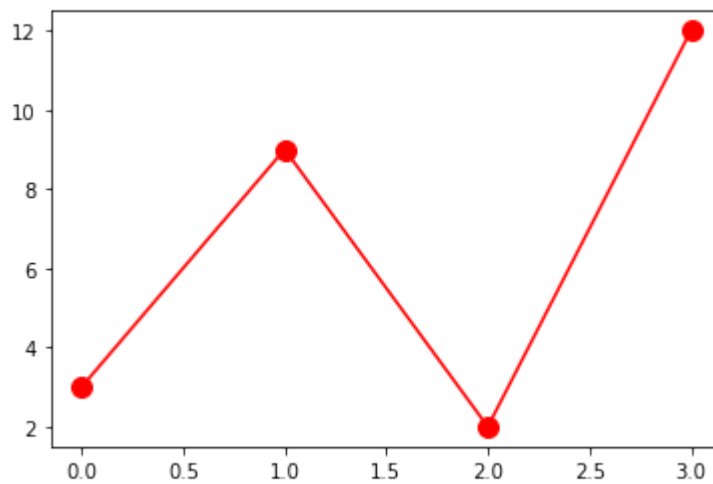

In [14]:
```python
plt.plot([3,9,2,12],marker= 'o',mec='r')
plt.show()
```

In [15]:
```python
plt.plot([3,9,2,12],marker= 'o',mec='r',mfc='y')
plt.show()
```
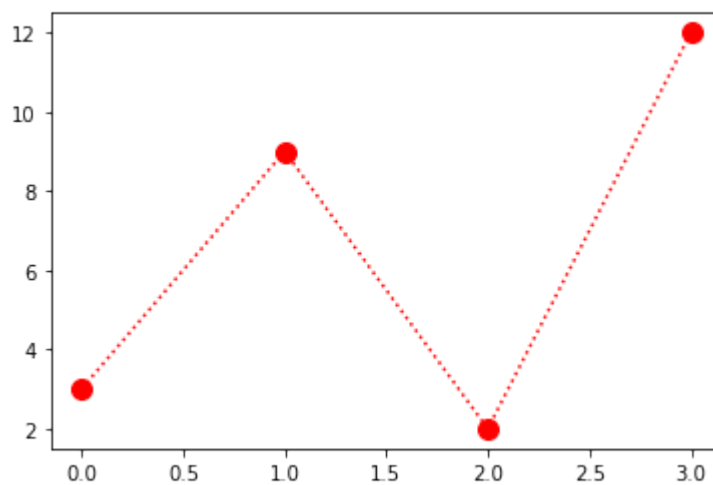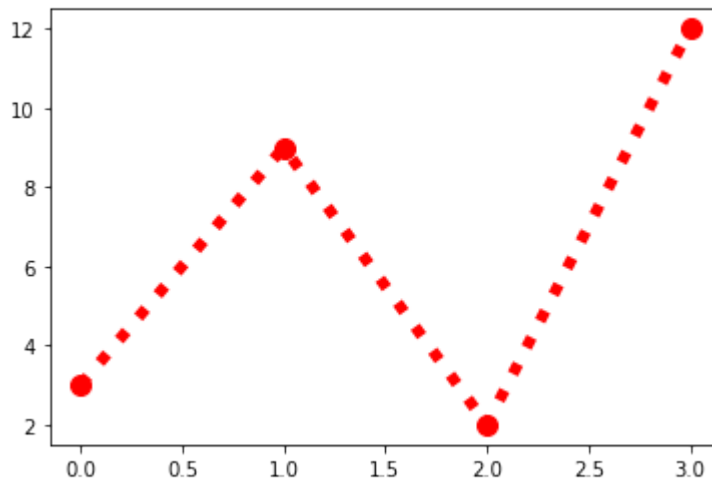

In [16]:
```python
plt.plot([3,9,2,12],marker= 'o',ms=10,color='r')
plt.show()
```


In [18]:
```python
plt.plot([3,9,2,12],marker= 'o',ms =10,color='r',ls='dotted')
plt.show()
```
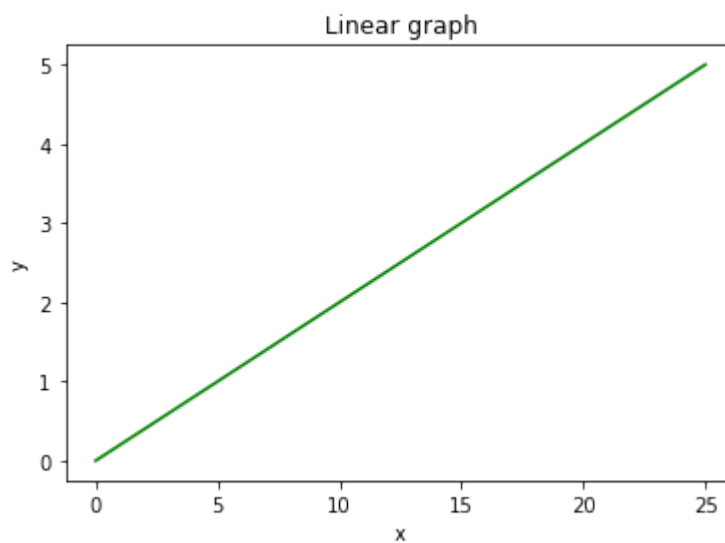
In [19]:
```python
plt.plot([3,9,2,12],marker= 'o',ms =10,color='r',ls='dotted',linewidth='5.6
plt.show()
```


In [20]:
```python
y = [0,1,2,3,4,5]
x= [0,5,10,15,20,25]
plt.plot(x, y, color='green')
plt.xlabel('x')
plt.ylabel('y')
plt.title("Linear graph")

plt.show()
```

In [24]:
```python
x=np.array([0,1,2,3])
y=np.array([4,9,2,10])
plt.subplot(2,2,1)
plt.plot(x,y)
plt.title("A")

x=np.array([0,1,2,3])
y=np.array([10,7,4,8])
plt.subplot(2,2,2)
plt.plot(x,y)
plt.title("B")

x=np.array([0,1,2,3])
y=np.array([4,9,2,10])
plt.subplot(2,2,3)
plt.plot(x,y)
plt.title("C")

x=np.array([0,1,2,3])
y=np.array([10,7,4,8])
plt.subplot(2,2,4)
plt.plot(x,y)
plt.title("D")

plt.suptitle("4graphs")
plt.show()
```
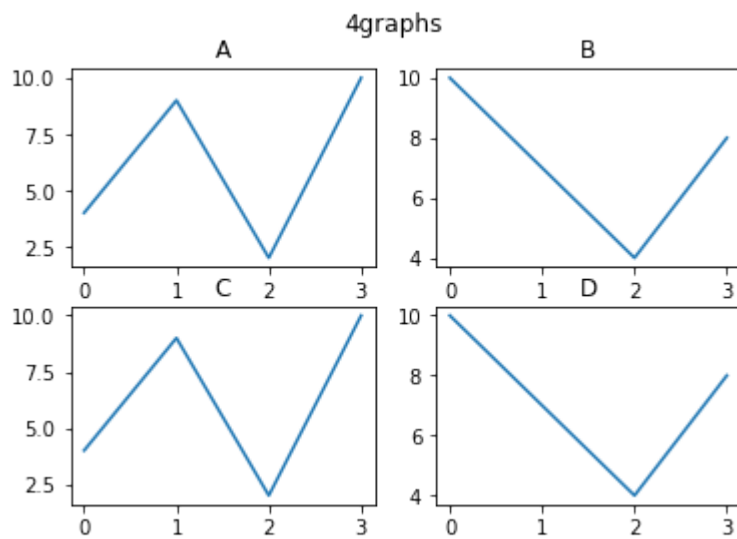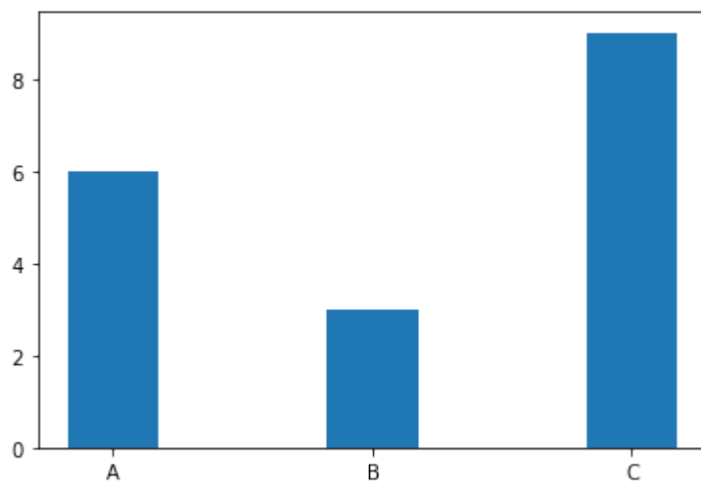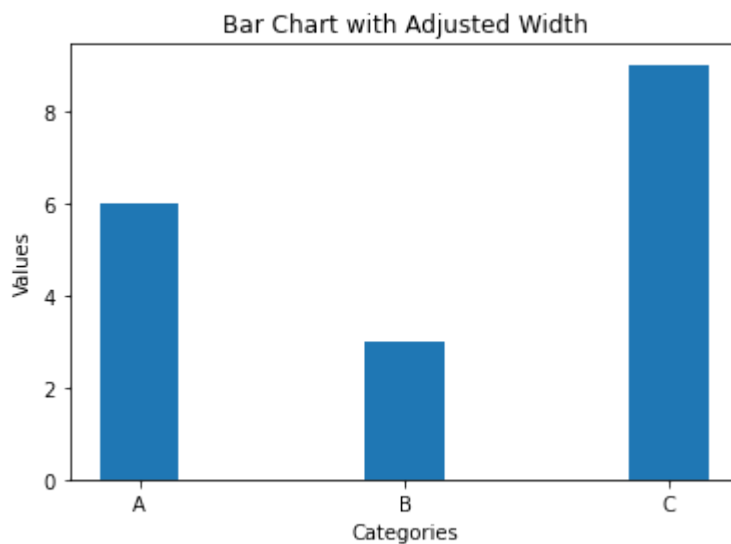
In [2]:
```python
x=np.array(["A","B","C"])
y=np.array([6,3,9])
plt.bar(x,y, width = 0.35)
plt.show()
```
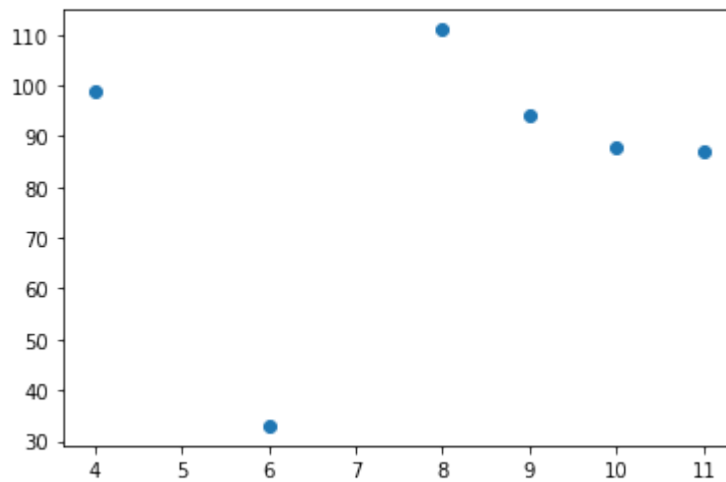

In [3]:
```python
import numpy as np
import matplotlib.pyplot as plt

x = np.array(["A", "B", "C"])
y = np.array([6, 3, 9])
plt.bar(x, y, width=0.3)

plt.xlabel("Categories")
plt.ylabel("Values")
plt.title("Bar Chart with Adjusted Width")
plt.show()
```
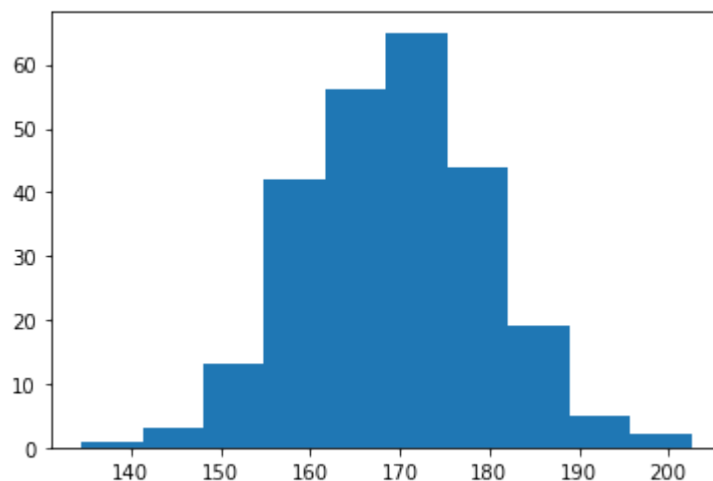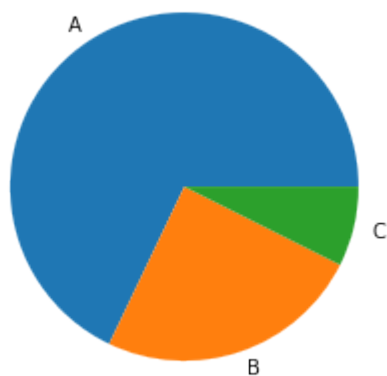
In [26]:
```python
x=np.array([4,8,11,9,10,6])
y= np.array([99,111,87,94,88,33])
plt.scatter(x,y)
plt.show()
```
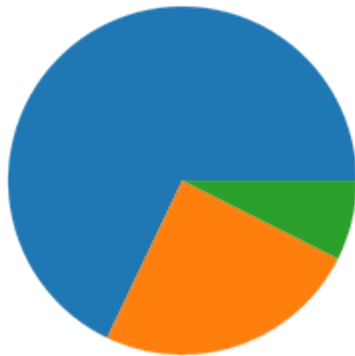

In [27]:
```python
x=np.random.normal(170,10,250)
plt.hist(x)
plt.show()
```
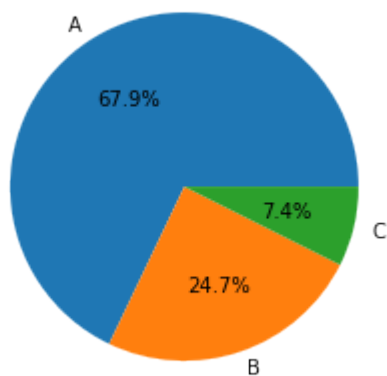

In [32]:
```python
y=np.array([55,20,6] )
l =["A","B","C"]
plt.pie(y,labels=l)
plt.show()
```

In [31]:
```python
y=np.array([55,20,6] )
plt.pie(y)
plt.show()
```


In [35]:
```python
y=np.array([55,20,6] )
l=["A","B","C"]
plt.pie(y,labels=l,autopct='%1.1f%%')
plt.show()
```

In [42]:
```python
import matplotlib.pyplot as plt


labels = ['A', 'B', 'C', 'D']
sizes = [15, 30, 45, 10]

plt.pie(sizes, labels=labels, autopct='%1.1f%%', labeldistance=1.2)

plt.show()
```
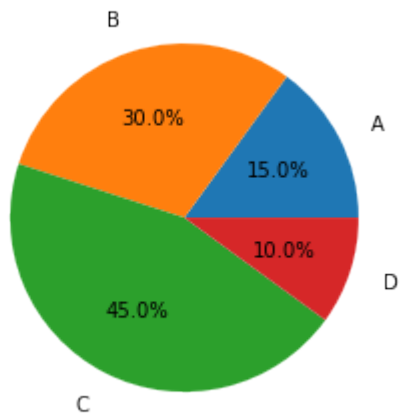

In [ ]: