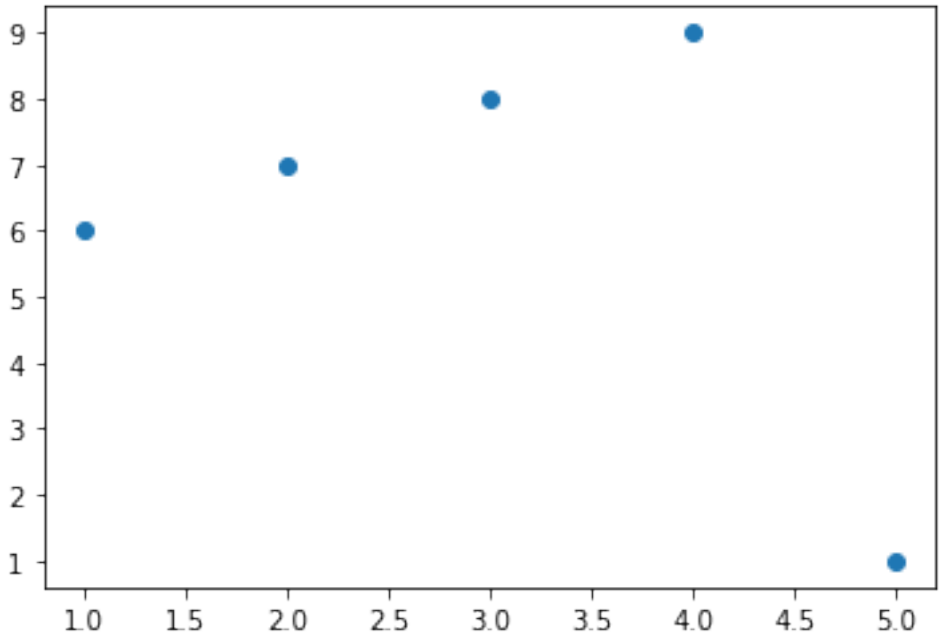
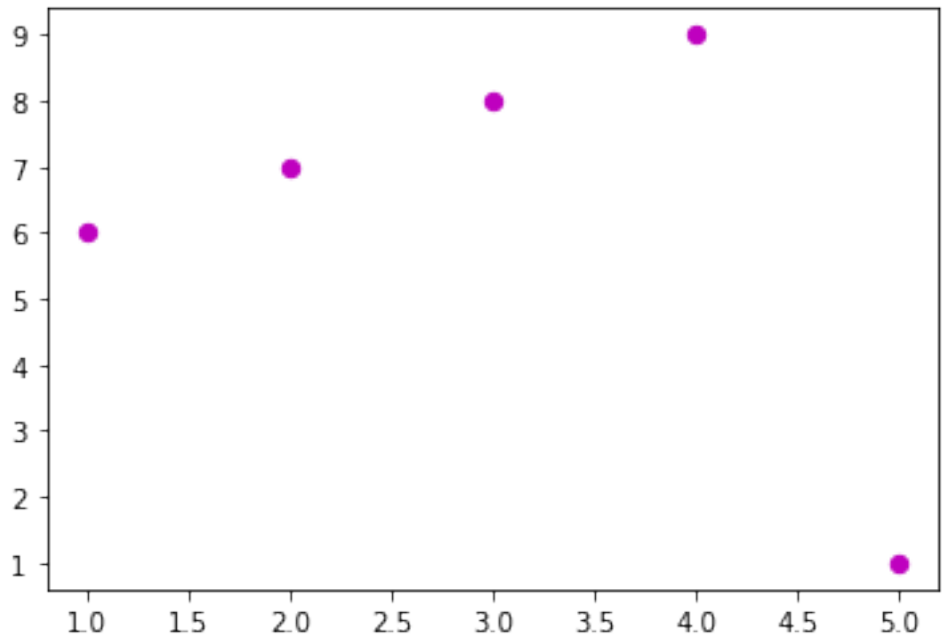
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt

a=np.array([1,2,3,4,5])
b=np.array([6,7,8,9,1])
plt.scatter(a,b,)
```

```
<matplotlib.collections.PathCollection at 0x2447841e400>
```



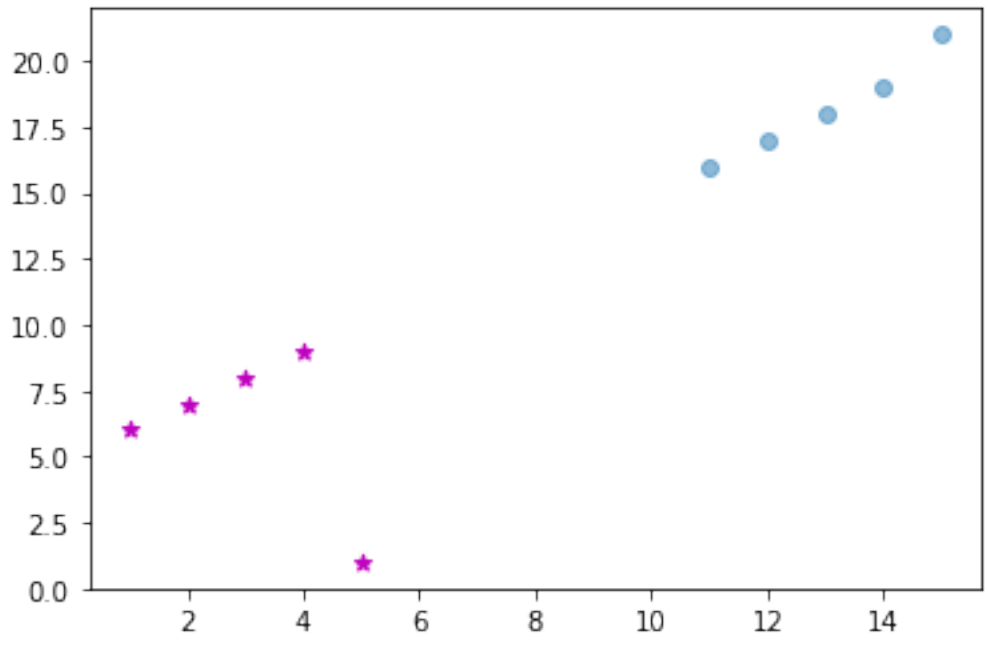

```
plt.scatter(a,b,s=40,color='m')
```

```
<matplotlib.collections.PathCollection at 0x24478bde850>
```



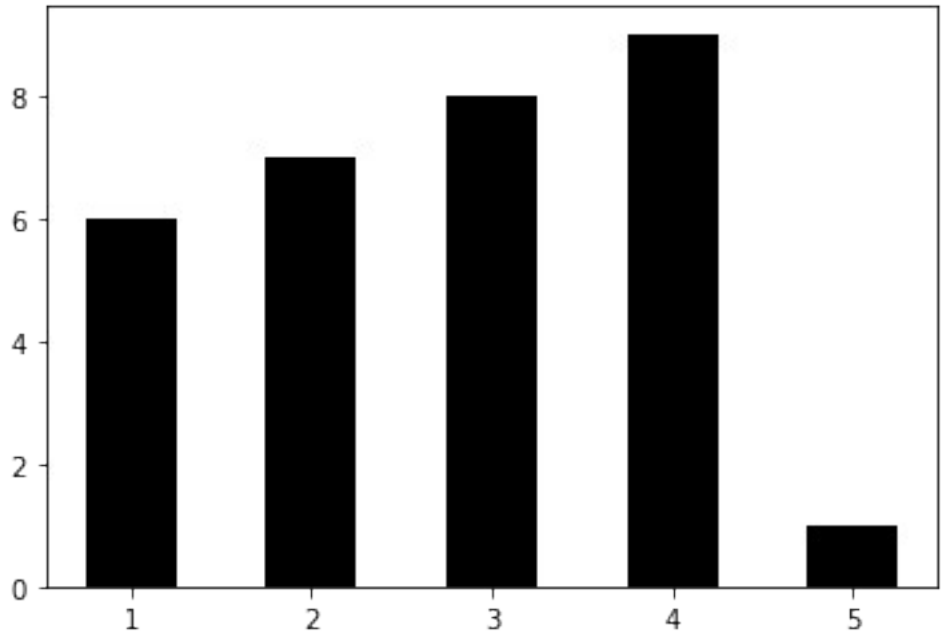

```
a1=np.array([11,12,13,14,15])
b1=np.array([16,17,18,19,21])
plt.scatter(a1,b1,alpha=0.5) #alpha for transperancy
plt.scatter(a,b,s=40,color='m',marker="*")
```

```
<matplotlib.collections.PathCollection at 0x24478c58d90>
```



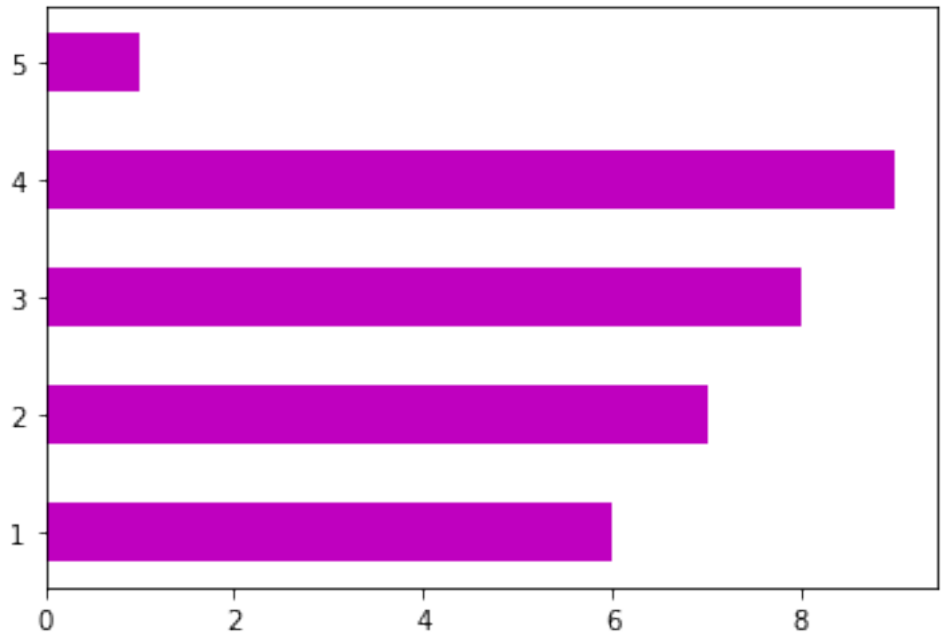

```
plt.bar(a,b,color='k',width=0.5)
```

```
<BarContainer object of 5 artists>
```



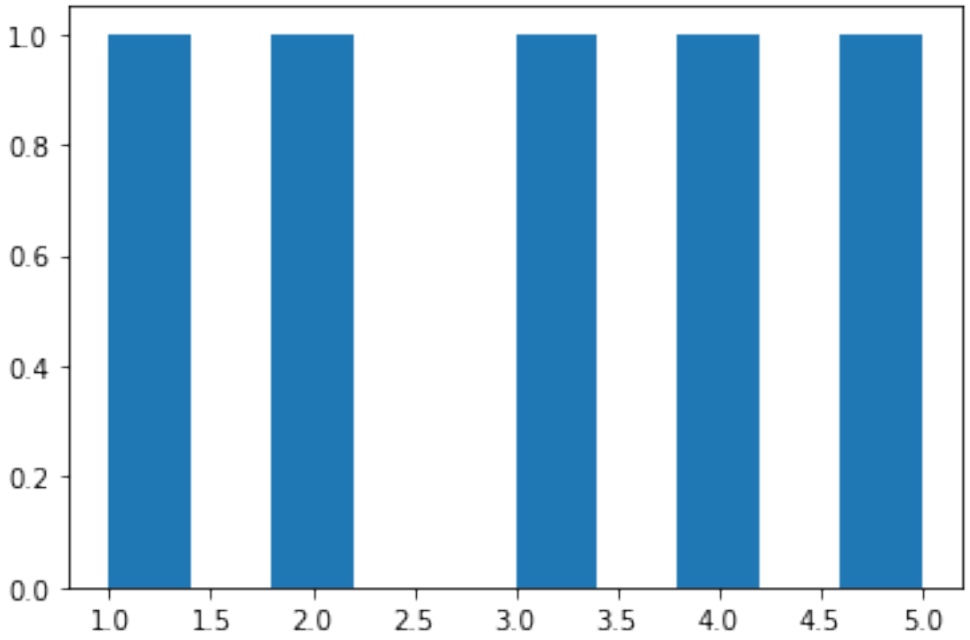

```
plt.barh(a,b,color="m",height=0.5)
```

```
<BarContainer object of 5 artists>
```

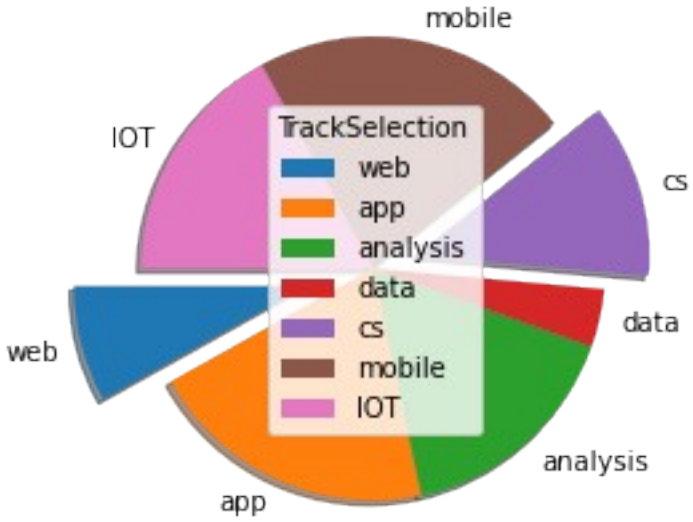



```
plt.hist(a)#create histogram for individual colum
```

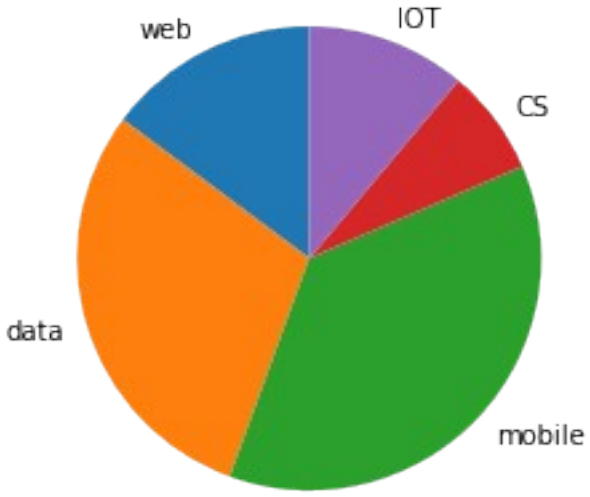
```
(array([1., 0., 1., 0., 0., 1., 0., 1., 0., 1.]),
 array([1. , 1.4, 1.8, 2.2, 2.6, 3. , 3.4, 3.8, 4.2, 4.6, 5. ]),
 <BarContainer object of 10 artists>)
```



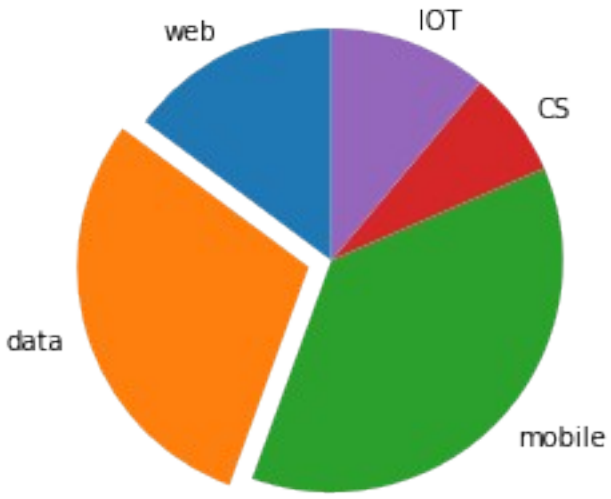

```
track_stud=np.array([20,50,40,10,30,55,42])
track_name=np.array(["web","app","analysis","data","cs","mobile","IOT"
])
ex=[0.3,0,0,0,0.2,0,0]
c=['r','k','Pink','g','m','b','c']
plt.pie(track_stud,labels=track_name,startangle=180,explode=ex,shadow=
True)
plt.legend(title="TrackSelection",loc='center')

<matplotlib.legend.Legend at 0x24478dbb610>
```




```
plt.pie(track_stud,labels=track_name,startangle = 90)
plt.show()
```




```
ex = [0,0.1,0,0,0]
plt.pie(track_stud,labels=track_name,startangle = 90,explode=ex)
plt.show()
```


web
IOT
CS
data
mobile