

```

import numpy as np
x =np.array([
    [40,45],
    [45,43],
    [35,42],
    [75,65],
    [80,82],
    [85,80],
    [78,95],
    [92,84],
    [78,98]

])

from sklearn.cluster import KMeans
KMeans =KMeans(n_clusters=4,random_state=0)
KMeans.fit(x)
lables =KMeans.labels_
print(lables)

[1 1 1 0 0 0 3 2 3]

import matplotlib.pyplot as plt
plt.scatter(x[:,0],x[:,1],c=lables)
plt.scatter(
    KMeans.cluster_centers_[ :,0],
    KMeans.cluster_centers_[ :,1],
    marker="x",
    s=200
)
plt.xlabel("maths mark")
plt.ylabel("science mark")
plt.title("K-Means clustering (K=3)")
plt.show()

```

