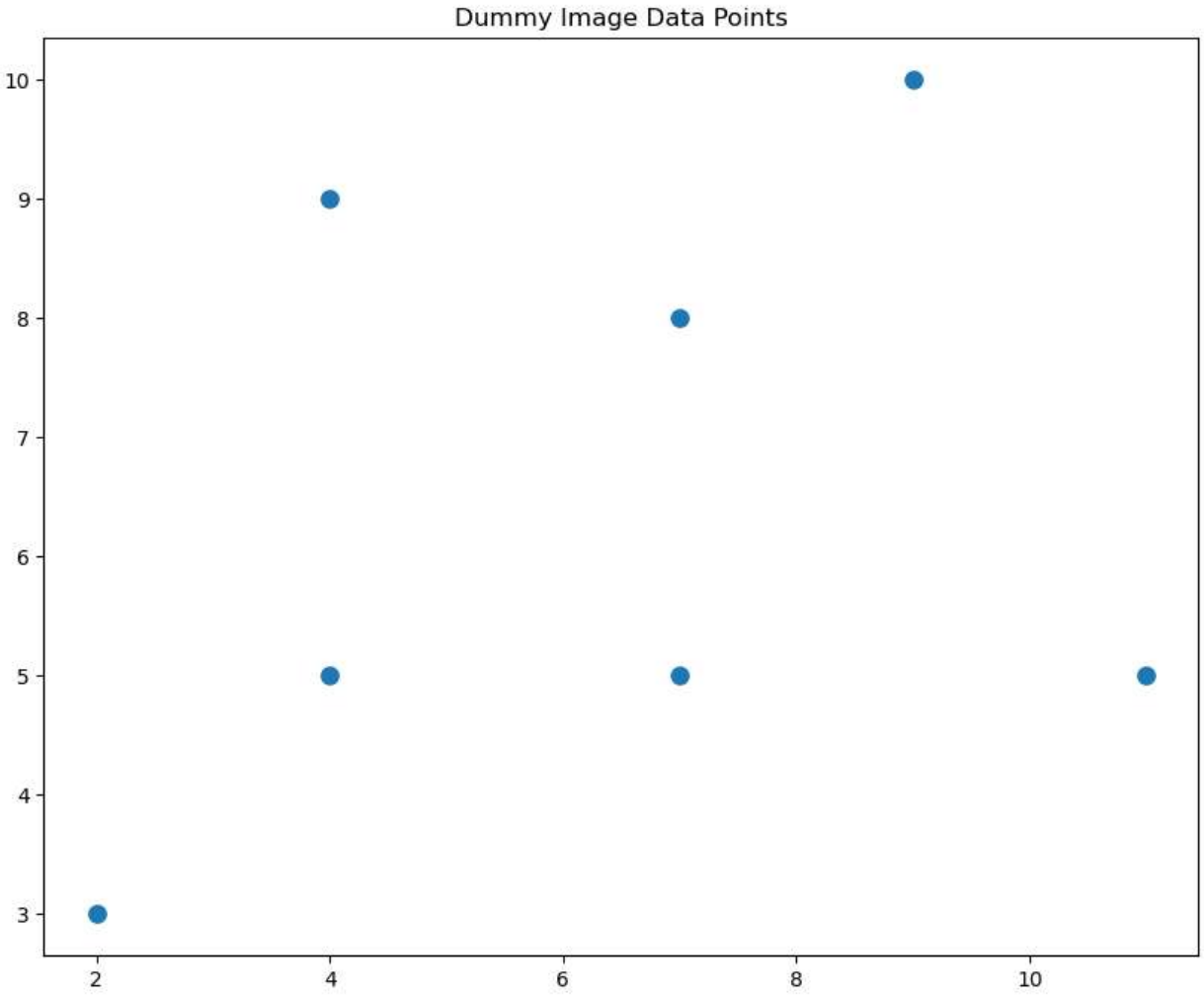
In [1]:
```
!python -m pip install scikit-learn-extra
```

```
Collecting scikit-learn-extra
  Downloading scikit_learn_extra-0.3.0-cp310-cp310-win_amd64.whl (343 kB)
     ------------------------------------ 343.0/343.0 kB 22.3 kB/s eta 0:00:00
Requirement already satisfied: numpy>=1.13.3 in c:\users\admin\anaconda3\lib\site-pac
kages (from scikit-learn-extra) (1.23.5)
Requirement already satisfied: scipy>=0.19.1 in c:\users\admin\anaconda3\lib\site-pac
kages (from scikit-learn-extra) (1.10.0)
Requirement already satisfied: scikit-learn>=0.23.0 in c:\users\admin\anaconda3\lib\s
ite-packages (from scikit-learn-extra) (1.2.1)
Requirement already satisfied: joblib>=1.1.1 in c:\users\admin\anaconda3\lib\site-pac
kages (from scikit-learn>=0.23.0->scikit-learn-extra) (1.1.1)
Requirement already satisfied: threadpoolctl>=2.0.0 in c:\users\admin\anaconda3\lib\s
ite-packages (from scikit-learn>=0.23.0->scikit-learn-extra) (2.2.0)
Installing collected packages: scikit-learn-extra
Successfully installed scikit-learn-extra-0.3.0
```

In [2]:
```
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn_extra.cluster import KMedoids
import warnings
warnings.filterwarnings('ignore')
```

In [3]:
```
data= np.array([[7,8],[9,10],[11,5], [4,9], [7,5], [2,3], [4,5]])
```

In [4]:
```
plt.figure(figsize=(10,8))
sns.scatterplot(x=data[:,0], y=data[:,1], marker='o', s=100)
plt.title('Dummy Image Data Points')
plt.show()
```



In [5]:
```
centers = [[4,5], [9,10]]
```

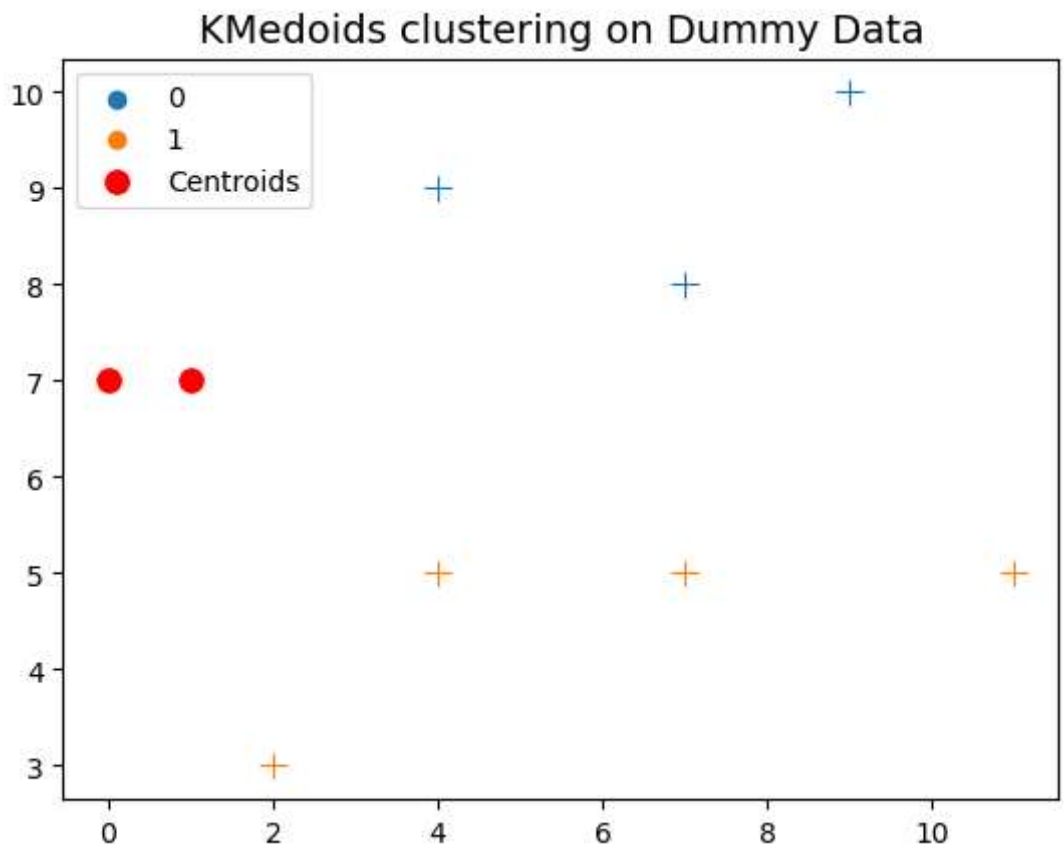
In [6]:
```
Kmedoids = KMedoids(n_clusters = 2)
Kmedoids.fit(data)
labels=Kmedoids.labels_
```

In [7]:
```
unique_label = set(labels)
colors_plot= [
 plt.cm.Spectral(each) for each in np.linspace(0,1,len(unique_label))
]
xy = data
plt.figure(figsize=(10,8))
```

Out[7]:
```
<Figure size 1000x800 with 0 Axes>
```

<Figure size 1000x800 with 0 Axes>

In [8]:
```
sns.scatterplot(x=xy[:,0], y=xy[:,1], marker='+', hue= labels, s=100)
sns.scatterplot(Kmedoids.cluster_centers_[:,0], marker='o', color="red",
 label='Centroids', s=100)
plt.title("KMedoids clustering on Dummy Data", fontsize=14)
plt.legend()
plt.show()
```


KMedoids clustering on Dummy Data
0
1
Centroids
10
9
8
7
6
5
4
3
0
2
4
6
8
10

In [ ]: