

```
from sklearn.cluster import KMeans
```

```
wcss = []
```

```
for i in range(1, 11):
```

```
    kmeans = KMeans(n_clusters=i, init='k-means++')
```

```
    kmeans.fit(x)
```

```
    wcss_values = kmeans.inertia_
```

```
    wcss.append(wcss_values )
```

```
plt.figure(figsize=(8, 6))  
plt.plot(range(1, 11), wcss, marker='o')  
plt.title('Elbow Method')  
plt.xlabel('Number of clusters')  
plt.ylabel('WCSS')  
plt.show()
```