Implementation of K-mean algorithm

Aim

To implement the K-Means clustering algorithm on a small dataset and group data into clusters.

Code

```
from sklearn.cluster import KMeans

X = [[1, 2], [1, 4], [5, 8], [6, 9], [1, 0], [6, 6]]

kmeans = KMeans(n_clusters=2, random_state=0)

kmeans.fit(X)

print("Cluster labels:", kmeans.labels_)
```

Output

Cluster labels: [1 1 0 0 1 0]

Result

The algorithm grouped the data into 2 clusters. Points with similar positions are assigned the same cluster label.