**COMP4431 Lab assignment 2**

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1. K-means with sklearn for 3 clusters

**a. Find the centroids:**

The Centroids Of Source whose cluster is 3 :

[[5.006 3.428 1.462 0.246 ]

[6.85 3.07368421 5.74210526 2.07105263]

[5.9016129 2.7483871 4.39354839 1.43387097]]

**b. Use the Matplotlib to visualize the clustering results:**

图表, 散点图

描述已自动生成

2. K-means with sklearn for 4 clusters

**a. Find the centroids:**

The Centroids Of Source whose cluster is 4 :

[[5.006 3.428 1.462 0.246 ]

[6.9125 3.1 5.846875 2.13125 ]

[5.53214286 2.63571429 3.96071429 1.22857143]

[6.2525 2.855 4.815 1.625 ]]

**b. Use the Matplotlib to visualize the clustering results:**

图表, 散点图

描述已自动生成

3. K-means with sklearn for 3 clusters, normalized

**a. Find the centroids:**

The Centroids Of Normalized Source whose cluster is 3 :

[[0.80113979 0.5472692 0.23440877 0.03917808]

[0.70495129 0.32178747 0.59235975 0.21499323]

[0.75290517 0.34920791 0.53149597 0.16393735]]

**b. Use the Matplotlib to visualize the clustering results:**

图表, 散点图

描述已自动生成

4. K-means with sklearn for 4 clusters, normalized

**a. Find the centroids:**

The Centroids Of Normalized Source whose cluster is 4 :

[[0.69792651 0.33739007 0.58834889 0.22665026]

[0.80113979 0.5472692 0.23440877 0.03917808]

[0.75264296 0.35097959 0.53096549 0.16345989]

[0.72176224 0.28874378 0.59819549 0.19071126]]

**b. Use the Matplotlib to visualize the clustering results:**

图表, 散点图

描述已自动生成