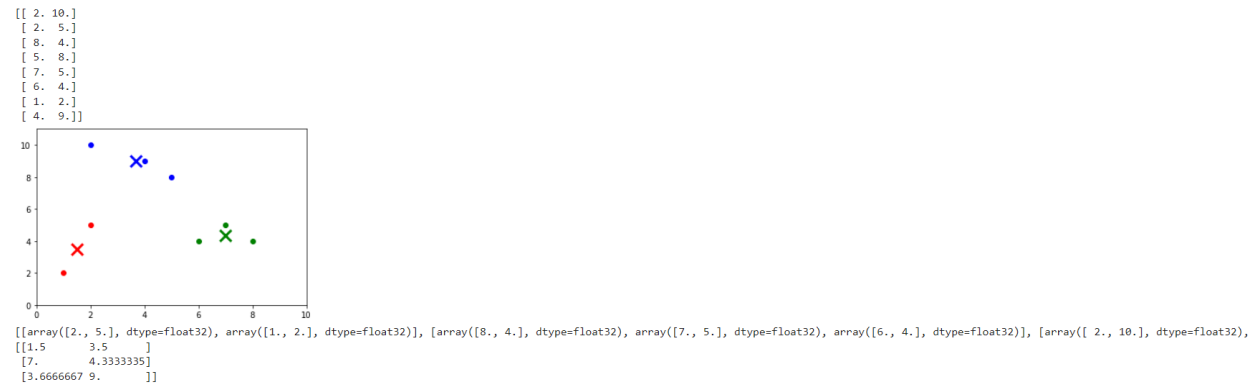


# Unsupervised Learning

## Overview:

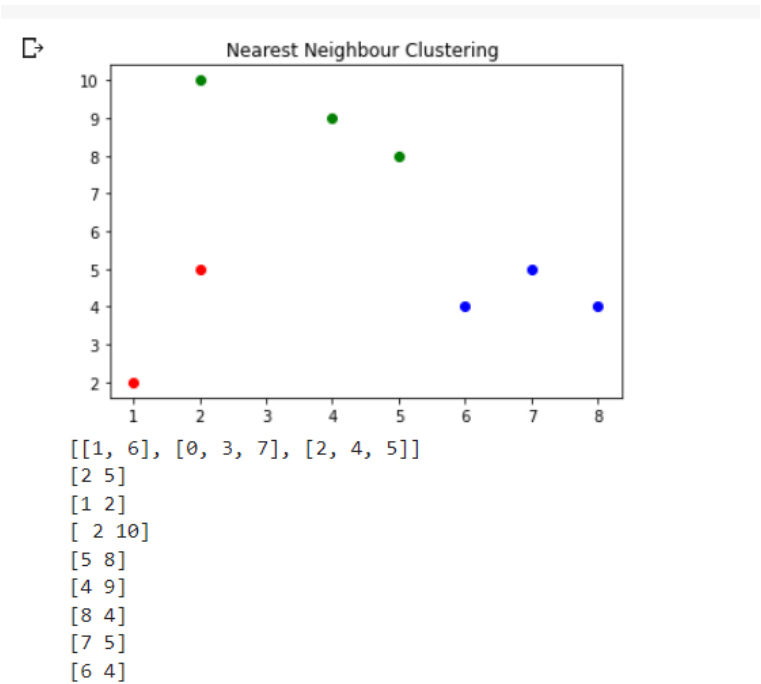
Unsupervised Learning algorithm that looks for patterns in the training data set, unlike supervised learning algorithms, they do not have a target value. So rather than plot the data to a specific point based on the input, it clusters data into groups based on common input features. For this assignment we implemented the following unsupervised learning algorithms

## K-means



Results: Results of k-means clustering

## Nearest-Neighbour Clustering



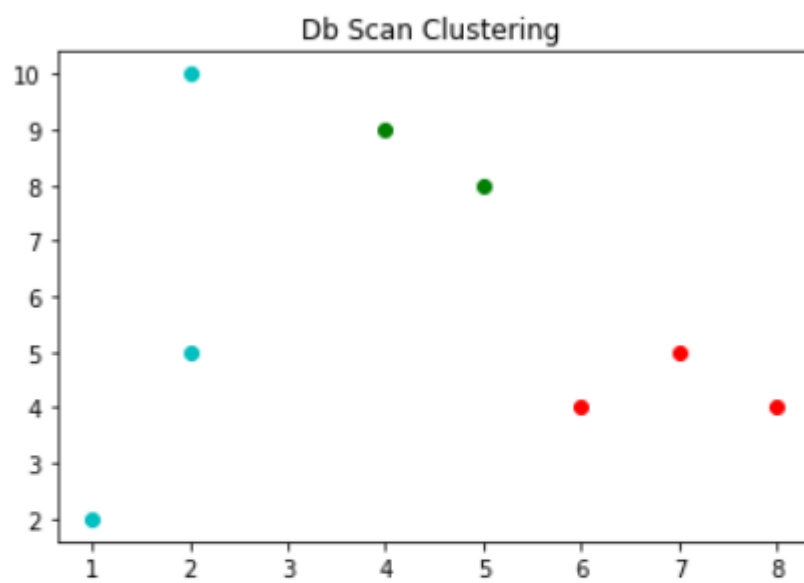
**Results:** Results of Nearest-Neighbour clustering

### DB-Scan

Noise clusters: [0]

Noise clusters: [1]

Noise clusters: [6]



[[2, 4, 5], [3, 7]]

Cluster n

[8 4]

[7 5]

[6 4]

Cluster n

[5 8]

[4 9]

**Results:** Results of DB-Scan