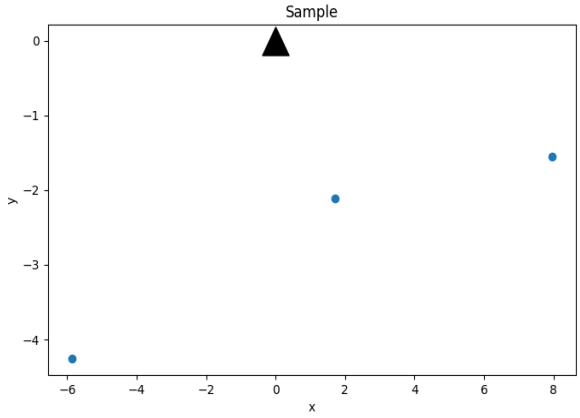
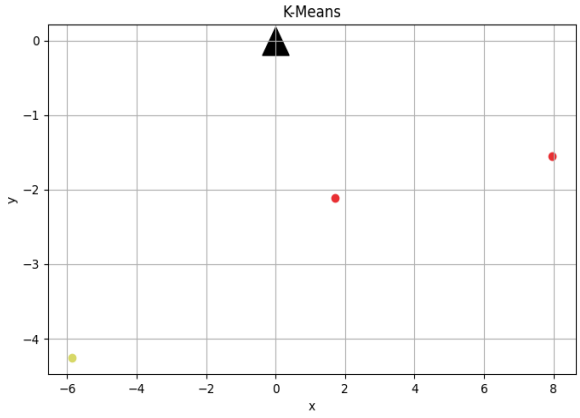
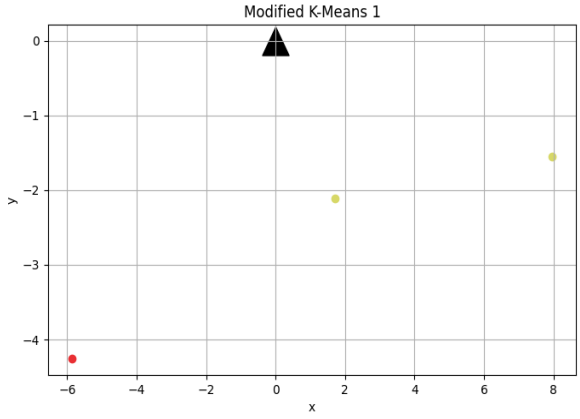
CLUSTER RESULT



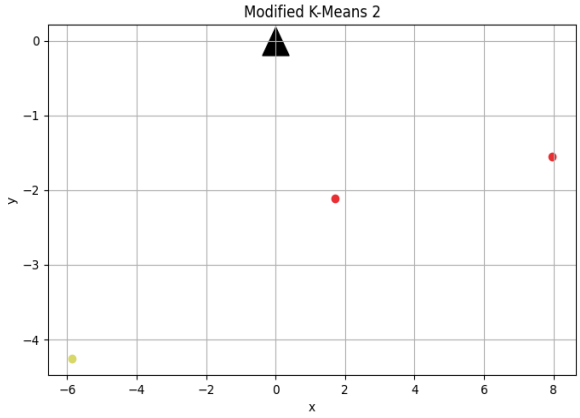
This Plot shows the position of users equipment represented as dots and base station represented as triangle.



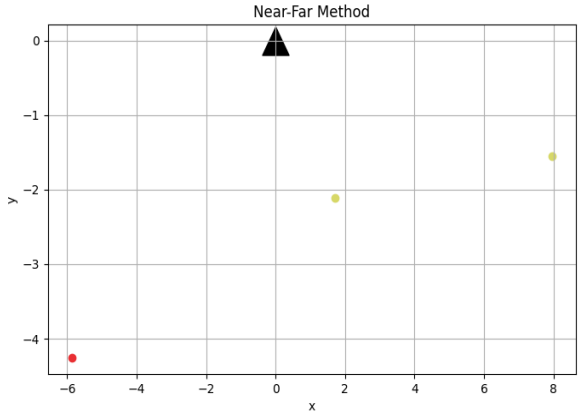
This Plot shows Form of Clusters created using K-Means Clustering.
In this process, we use Silhouette Score to set the value of K.
The colors represented clusters formed, total cluster formed are:2



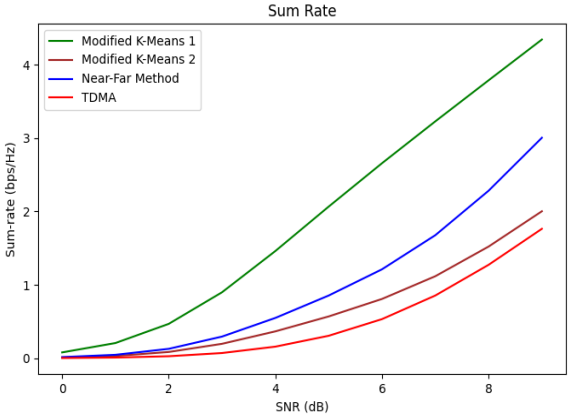
This Plot shows Form of Clusters created using Modified K-Means Clustering.
In this process, we use Optimum distance on Silhouette Score to set the value of K. The colors represented clusters formed, total cluster formed are:2



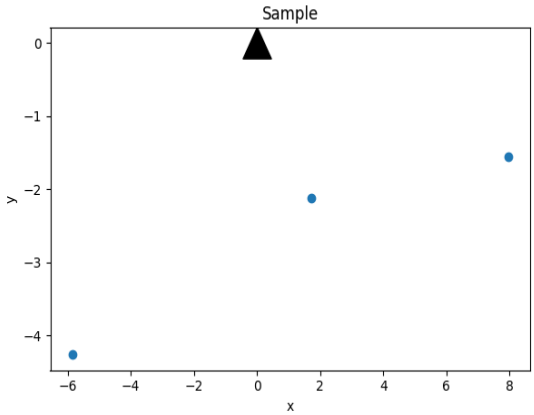
This Plot shows Form of Clusters created using Combination of K-Means Clustering and Near-Far Scheme. The colors represented clusters formed, total cluster formed are: 2

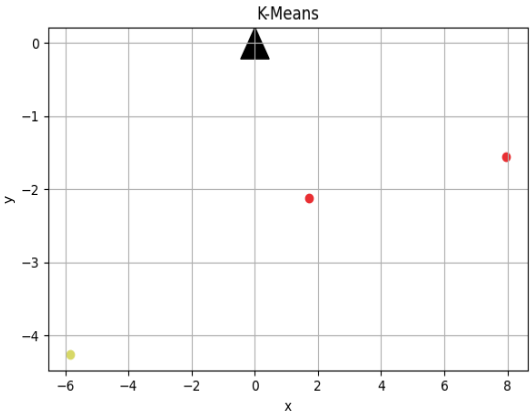


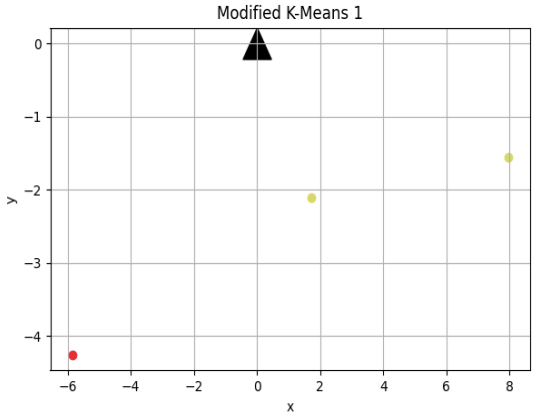
This Plot shows Form of Clusters created using Near-Far Method. The nearest user to the base station will be paired with the furthest. The colors represented clusters formed, total cluster formed are: 2

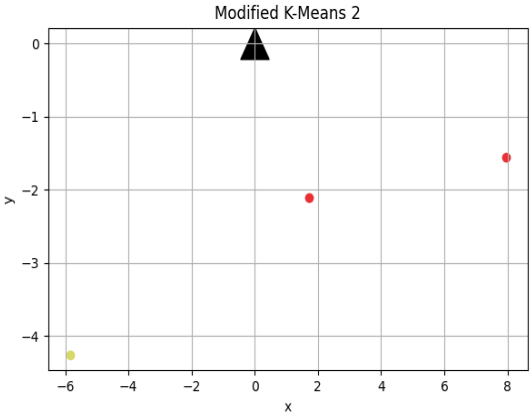


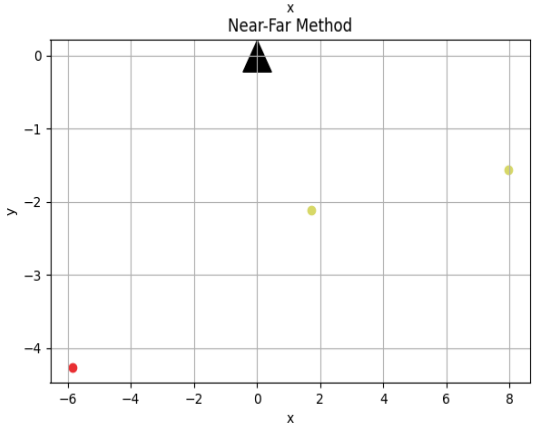
After some calculation, we obtained sume rate score for every clustering method, the best sum rate score goes to Modified K-Means 1, with improvement level .....%

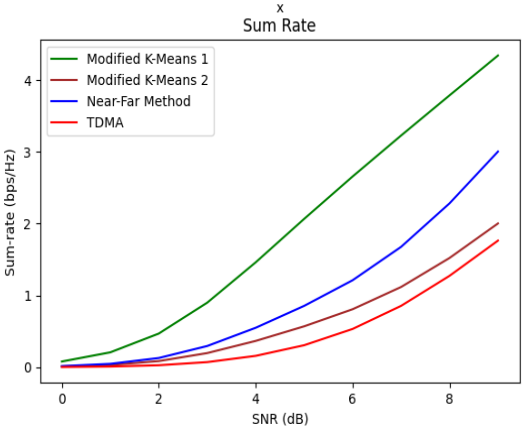

Sample
x
y


K-Means
x
y


Modified K-Means 1
x
y


Modified K-Means 2
x
y


Near-Far Method
x
y


Sum Rate
Modified K-Means 1
Modified K-Means 2
Near-Far Method
TDMA
Sum-rate (bps/Hz)
SNR (dB)

-5.857494614208023	-4.260091359078022	7.242832425451193	1.0	0.0	1.0
1.710342593359799	-2.1116205863990185	2.7173908970858163	0.0	1.0	0.0
7.95589782311869	-1.5559311262711653	8.10661654709313	0.0	1.0	0.0