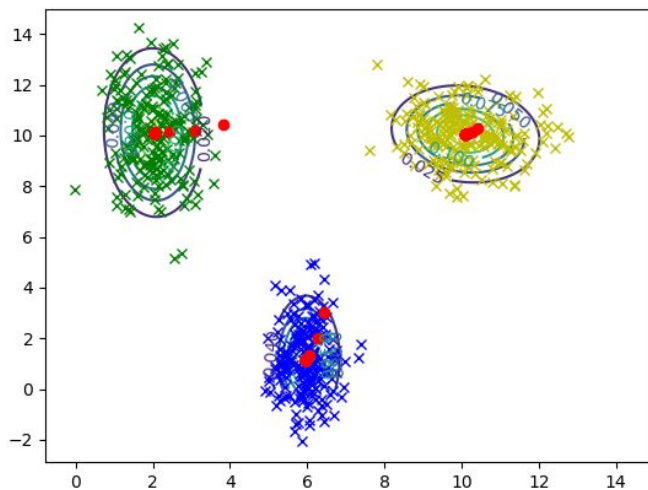


AI/ML : Lab Assignment - 6

B.Nikhil - 170050099

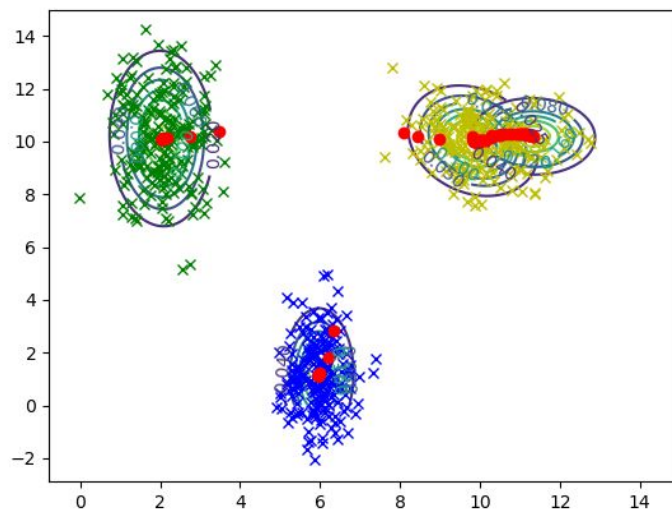
Task 1: Implementing EM for GMM

For $k = 3$ and given data in test.py we get the following plot



For $k = 4$

More sparse data is splitted into further classes if we increase k .



Changing μ , will just change the cluster centers

Changing σ , will change deviation from μ and will effect for changes in k .