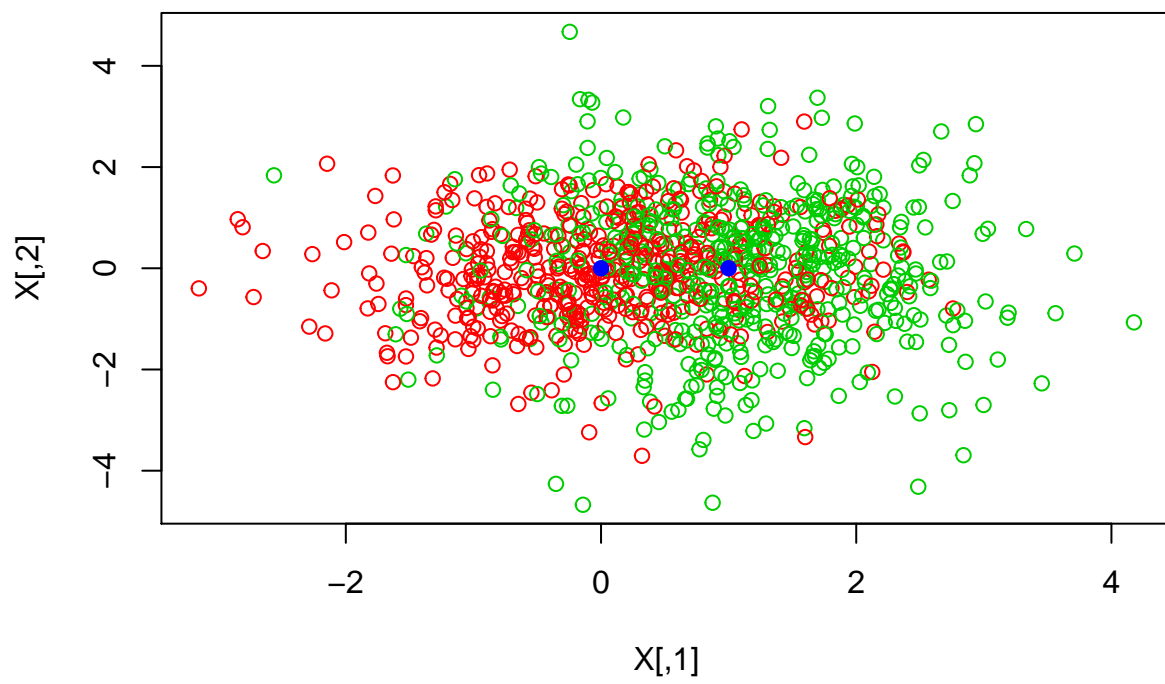


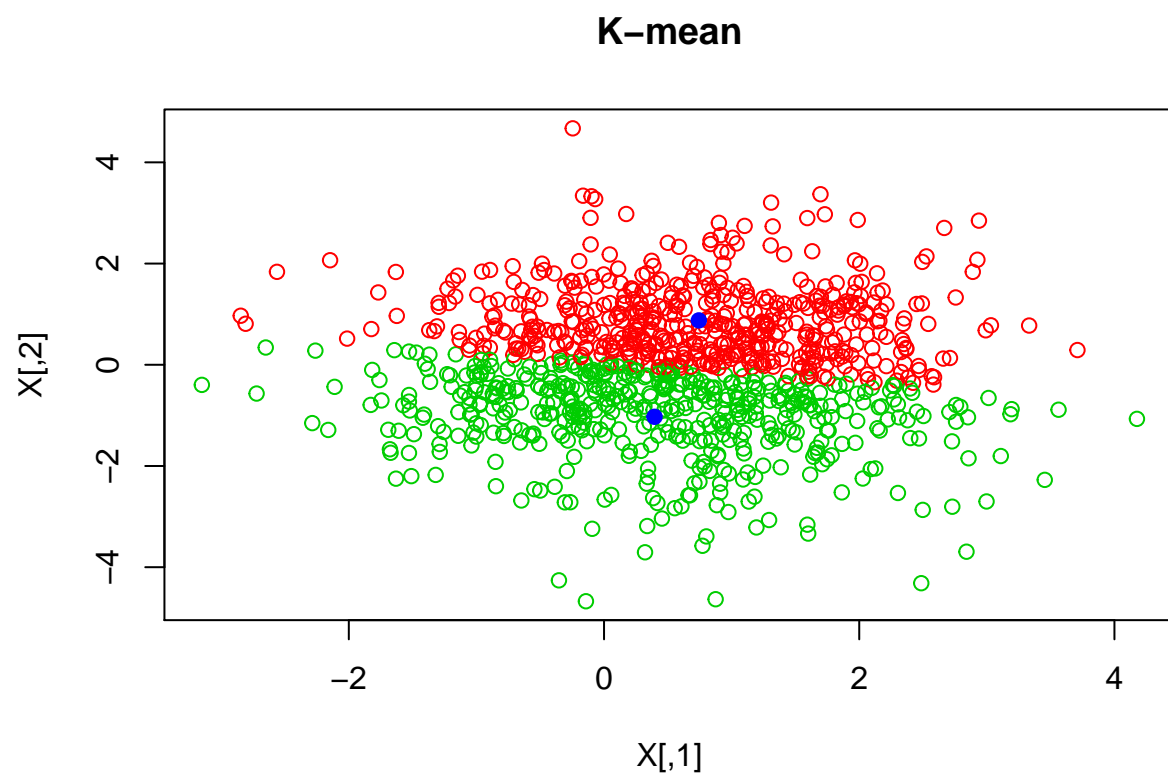
problem(g)

caojilin

3/4/2019

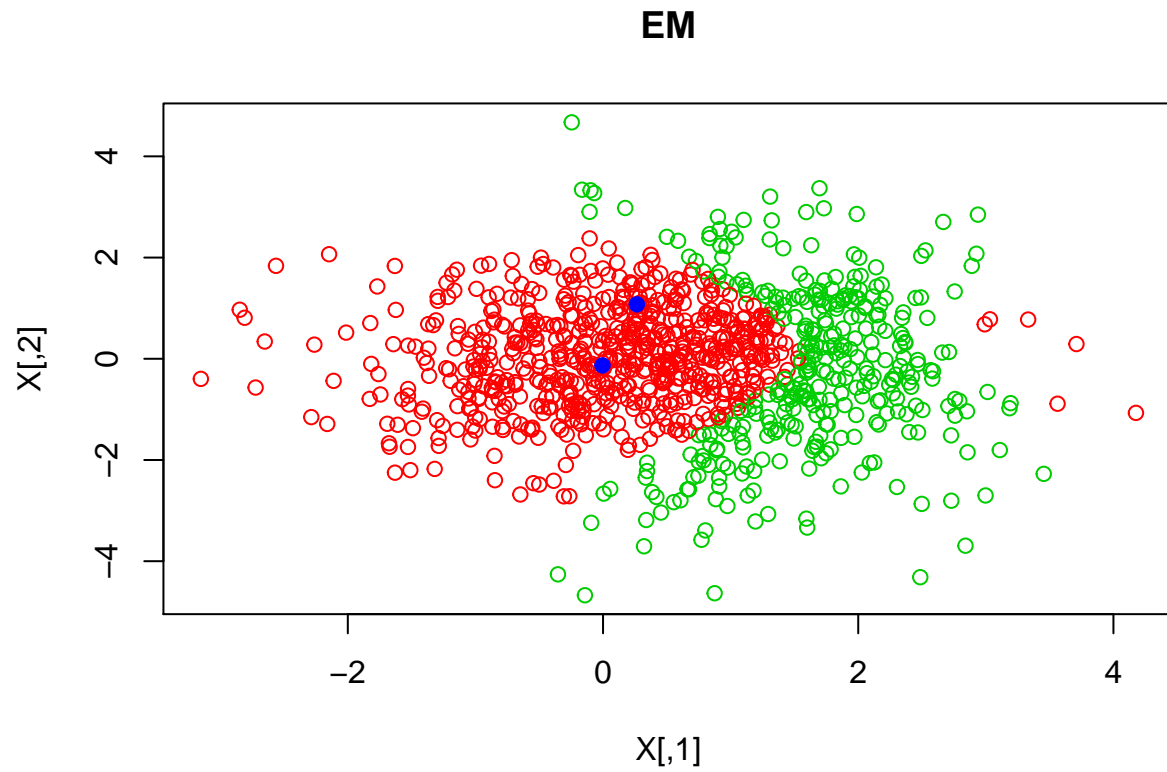
Original





```
## [1] "EM centers"
```

```
##           [,1]      [,2]  
## [1,]  0.265410491  1.0755750  
## [2,] -0.004121906 -0.1314222
```



K-means only calculates Euclidean distance, which is like a non-parametric approach, while EM assumes there exist underlying distributions and uses likelihood to calculate, which is more like a parametric approach. We know that original data is almost non-separable. K-mean gives us a “hard” classification while EM gives us a “soft” classification. Thus the estimated labels are different.