## Exercise 15

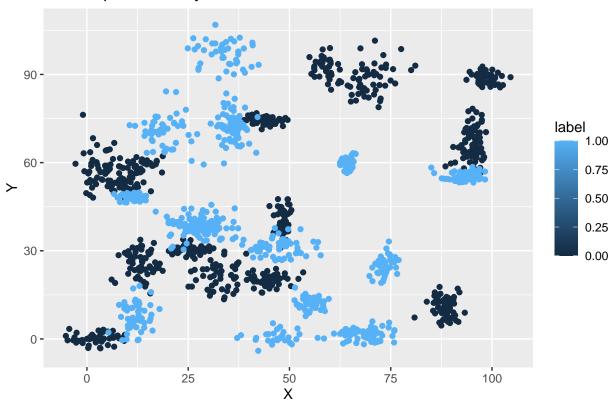
#### Bilal Kudaimi

### October 30, 2020

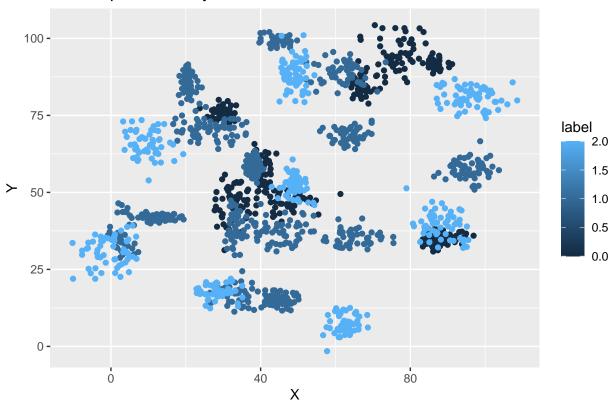
#A: Scatter plot of both data sets

#B: Fitting KNN model to each data set and plotting accuracies for each K value

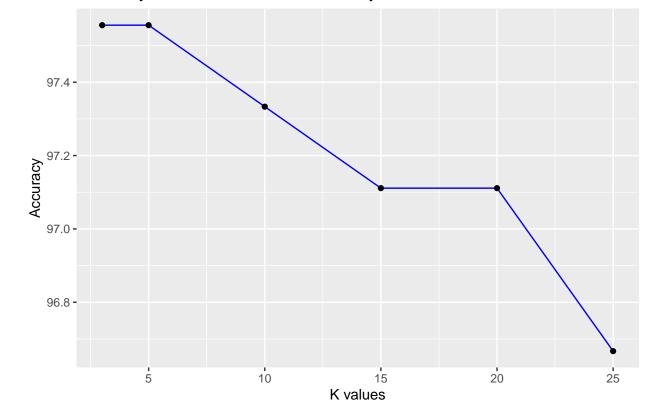
### Scatter plot of binary data



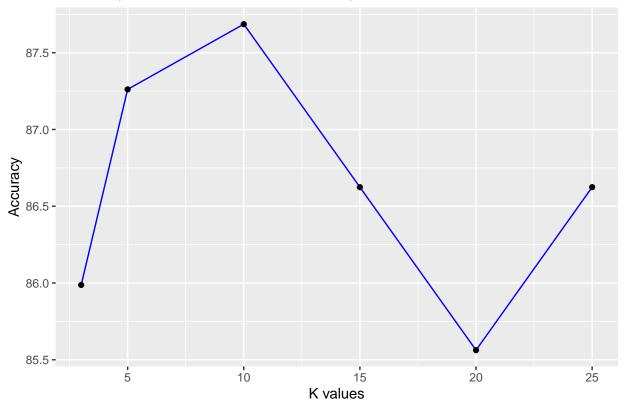
# Scatter plot of trinary data



## Accuracy at each K value for the binary data set



### Accuracy at each K value for the trinary data set



#C

I believe that linear classifiers would not work well with these datasets. If we look at the scatter plots, we can see that a straight line is not optimal to divide the data clusters.