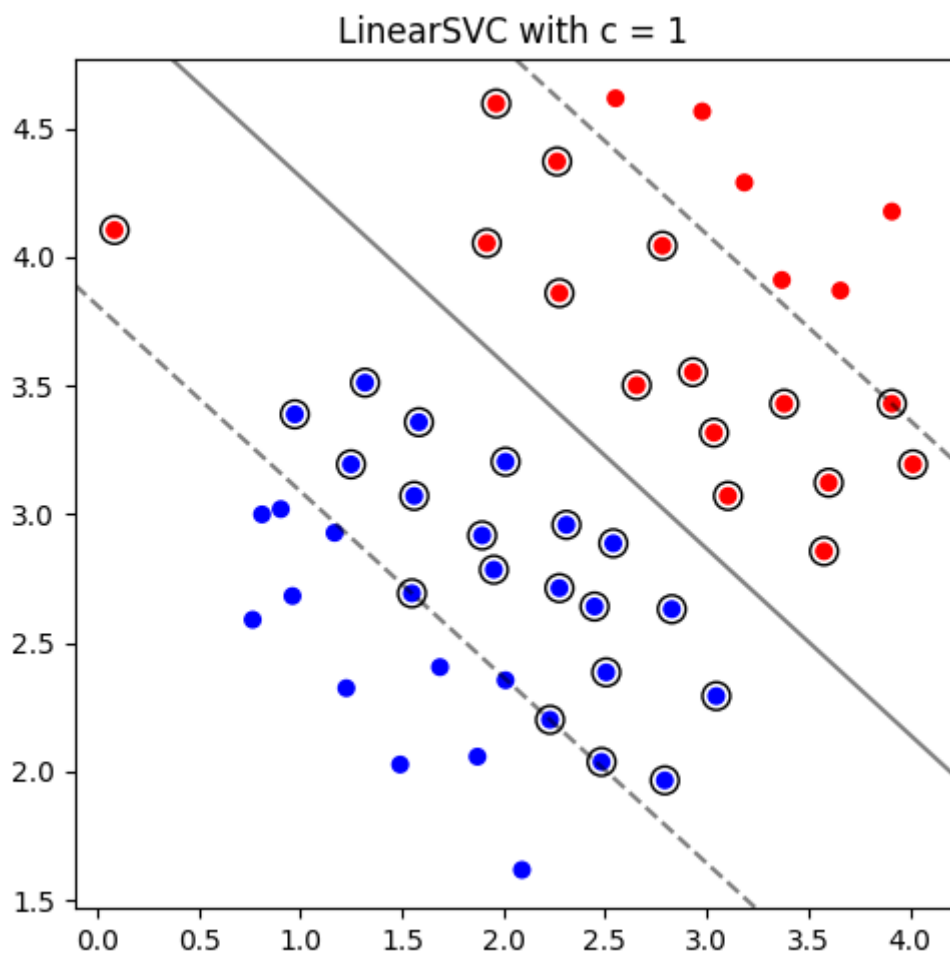


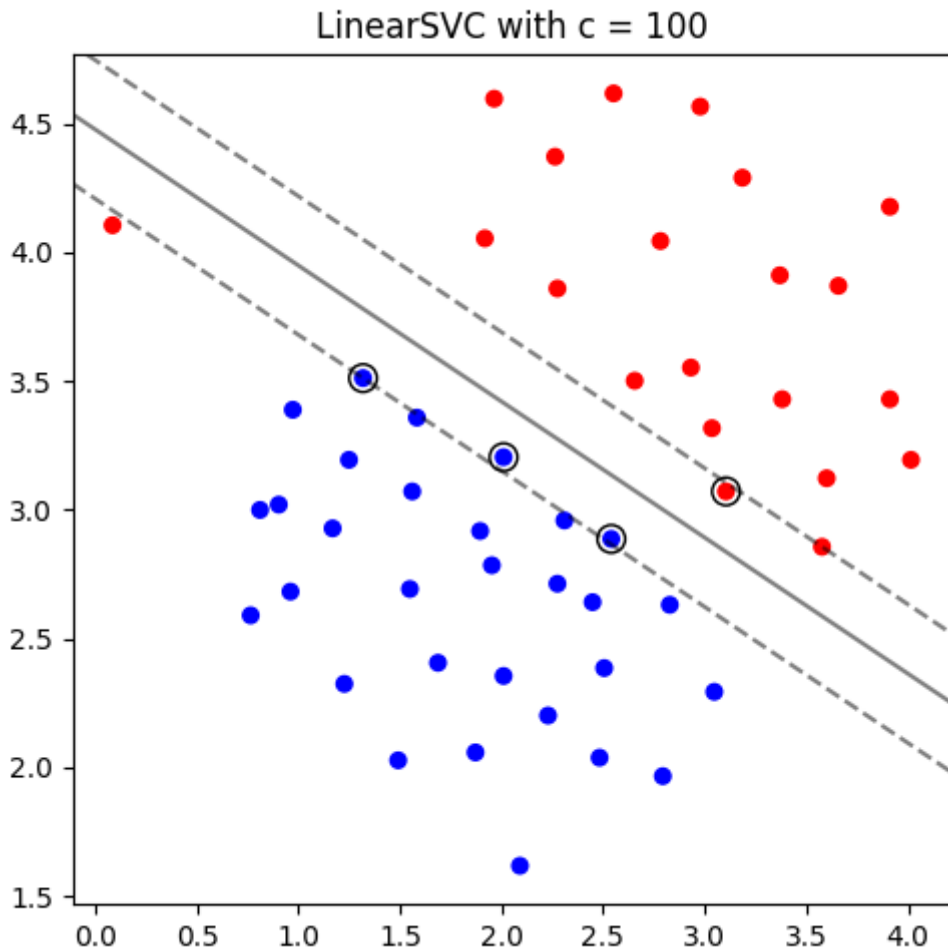
Homework #4 on Statistical Pattern Recognition

Name: Hesam Mousavi(9931155)

Group: #15

Linear SVM





Accuracy in LinearSVC with $c = 1$ is 98.04%

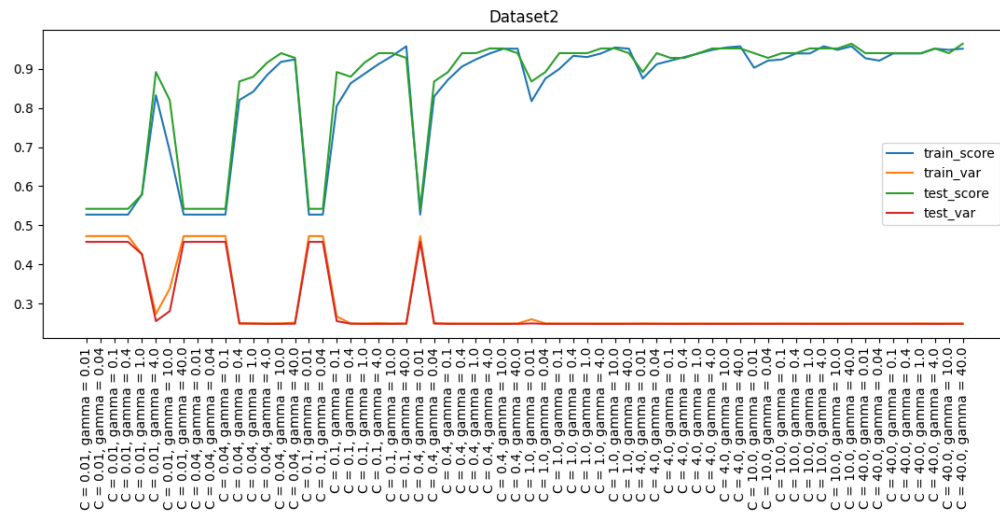
Accuracy in LinearSVC with $c = 100$ is 98.04%

Kernel SVM

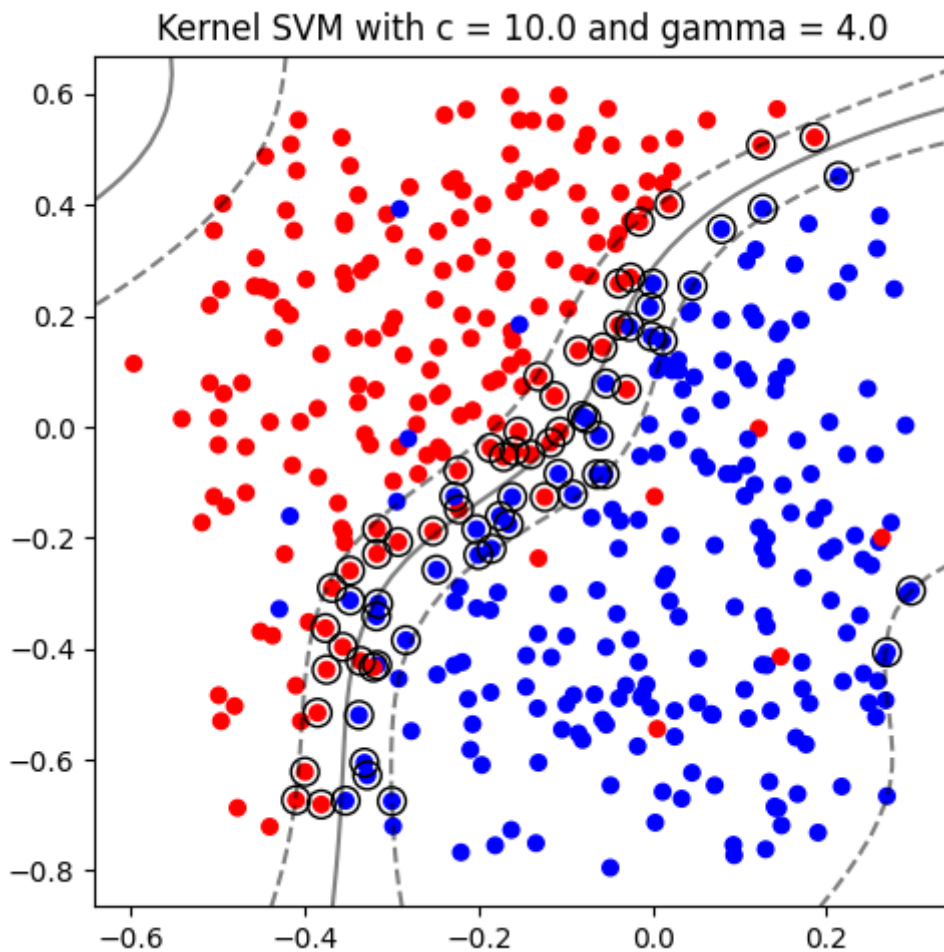
Determine the best value C by ten-time-ten-fold cross validation

best C is 10.0 and gamma is 4.0 with accuracy 94.89%

Plot train and test accuracies and their corresponding variances



Plot the data and the decision boundary for "Dataset2.mat"



Report the test accuracy

Test accuracy with best C and gamma is 93.98%

Thank you very much for taking the time to read this