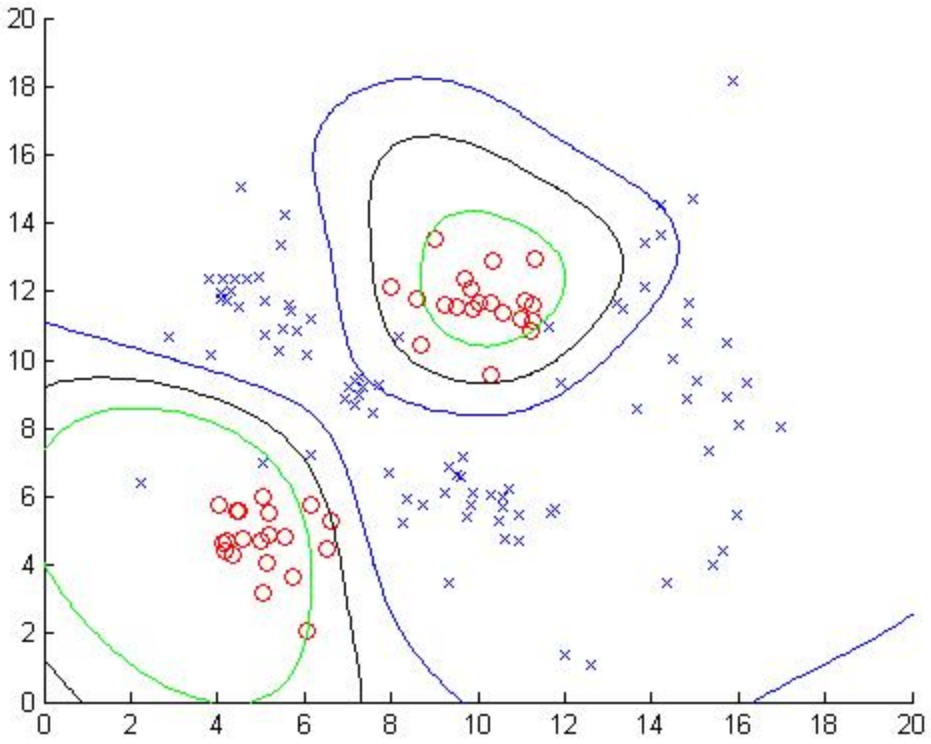
Jacob Oakes & Graham Fuller
Lab 5

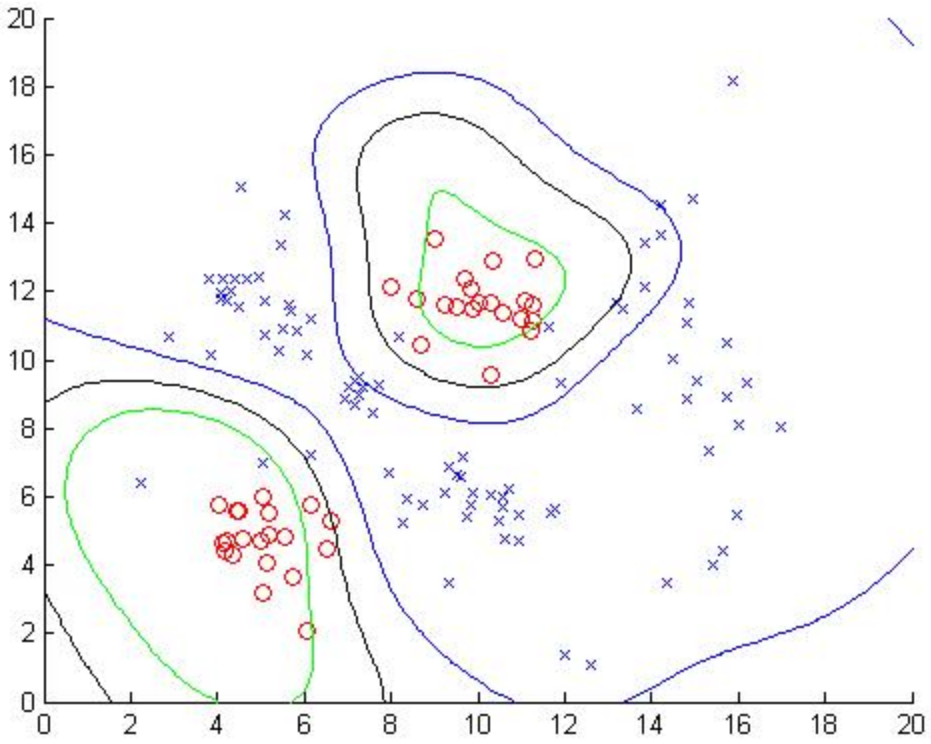
Kernel function: RBF
Kernel parameter : 10
Total test input size : 130

True Positives	39
False Negatives	1
True Negatives	86
False Positives	4
True Positive Rate	97.5%
False Positive Rate	4.44%



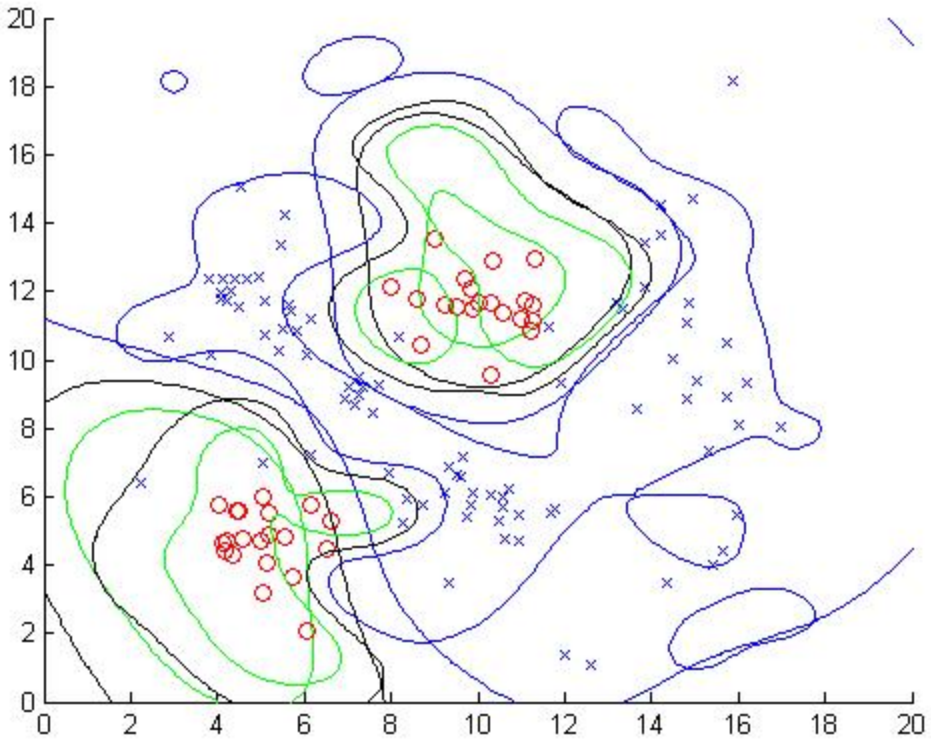
Kernel function: RBF
Kernel parameter : 8
Total test input size : 130

True Positives	40
False Negatives	0
True Negatives	86
False Positives	4
True Positive Rate	100%
False Positive Rate	4.44%



Kernel function: RBF
Kernel parameter : 2
Total test input size : 130

True Positives	40
False Negatives	0
True Negatives	81
False Positives	9
True Positive Rate	100%
False Positive Rate	10.0%



For all the results above we chose to use RBF as our kernel function because the data is not linearly separable. We chose three values for the input parameter for the RBF function to try and get a wider sample to see what would be the best input parameter to use. All of our results above seem reasonable because we were able to get a high TPR and low FPR. We found that RBF with an input parameter of 8 was the best choice for this test data. We don't

think that the classifier will ever reach 100% because some of the classes are so near each other.