Tristan Pitts
Introduction to Machine Learning
Homework 4

1a)

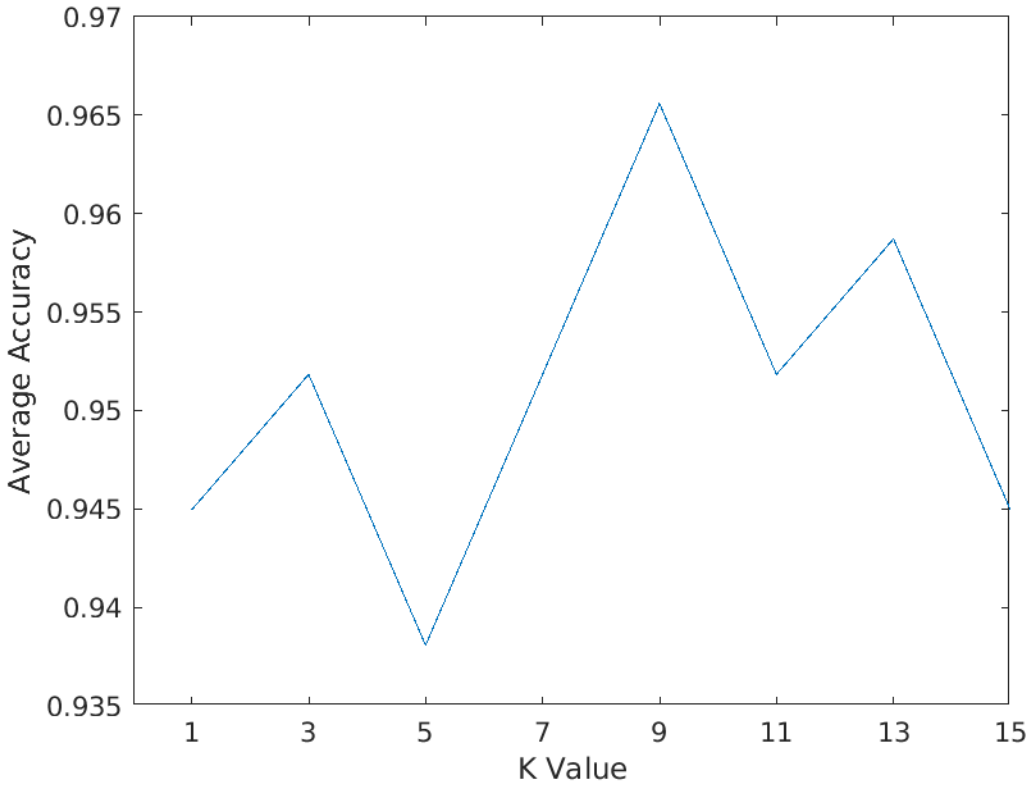

Figure 1: ps4-1-a.png

1a)

For this particular problem it appears that a value of 9 for K produces the most accurate result. This value may work for other problems, however the optimal K value depends heavily on the distribution of the training data which will vary for every problem.

2b)

5×2 **table**

Sigma	Accuracy
0.1	0.72
0.5	0.68
1	0.68
3	0.64
5	0.28

2b) From the results gathered it appears that a smaller sigma value will give a more accurate result.