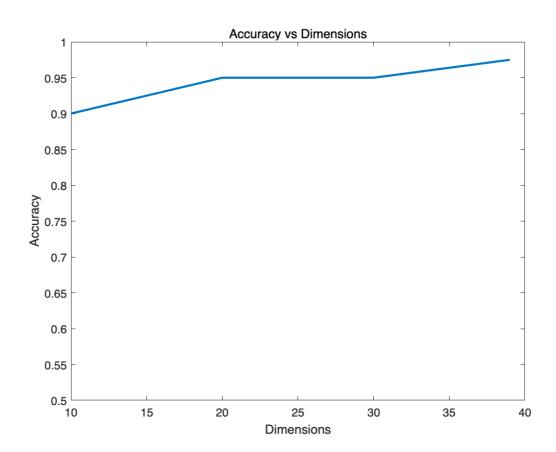
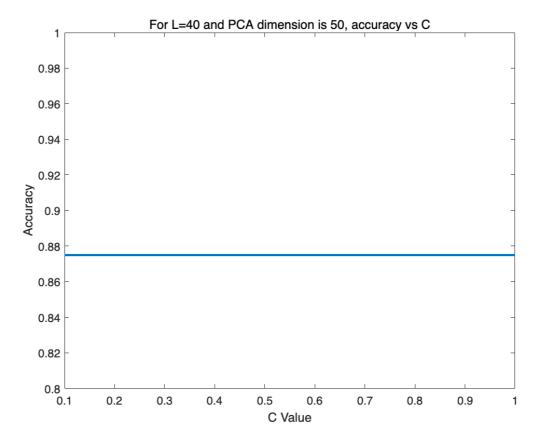
1. Accuracy for LDA:

the four accuracy is 0.9000 0.9500 0.9500 0.9750



As the result shows, in the PCA dimension of 50, with the LDA dimension increase, the accuracy will increase. It's because when the LDA dimension is small, it will lose a lot of information. In other word, the large dimension can contain more information which makes it more accurate. Also, the PCA dimension has a little effect on the accuracy. I tried to change the PCA dimension but the accuracy not changed.

2. Optional: Classification using LDA+SVM:



As the result shows in the graph, as the C value changes, the accuracy not changed and equal to 0.875. So, in the same PCA dimension and kernel function, the C value does not affect the accuracy. The result of changing PCA and LDA dimensions is same as the result in the LDA part.