MTH 410/510 HOMEWORK 3

1. Use the stochastic subgradient method on the "spam dataset" from d2l to solve the support vector machine problem. Your MATLAB program uses the training data to find the separating hyperplane. Then use the test data to show the accuracy of your method.

2. Use the subgradient method and the "US city dataset" from d2l to find the smallest ball that encloses all points given in the data. Please show the center and the radius of the ball as outputs.