## **READ ME**

Q1. (on paper)

Q2. (on paper)

Q3. Three separate sections with the rbf code implemented for different data sets. Each one has a rbf\_reg(xtest,xtrain,ytrain,theta,lamb) which takes in x\_test, x\_train, y\_train, lambda, and theta and returns a set of y\_predictions for the x\_test set, rbf\_val(xvalid,yvalid,xtrain,ytrain,) which takes in x\_valid, y\_valid, x\_train, y\_train, and will run the rbf regression over the given grid of lambda and theta values then will print the optimal lambda, theta, and lowest error, and tst\_rmse(y,ytest) which takes in your y\_predictions from running rbf\_reg and will find the error between them and the true y\_test values. Each of these functions are straightforward to call like any other function.