CSC242 Project 4 Report

Instructions to run the project:

Open the project folder in the terminal and then use the following command to compile it:  
javac src/\*/\*/\*/\*.java

After it as compiled used this command to run the desired java file. I have implemented the Classifiers with display along with this report to give the user a visual representation of the output.  
  
java -cp ./src learn.lc.examples.PerceptronClassifierWithDisplay src/learn/lc/examples/earthquake-noisy.data.txt 700 0.95

You can change the file name, number of weight updates, and alpha accordingly in the command.  
  
  
1) PerceptronClassifierEarthquakeClean  
  
  
  
Classifier used: Perceptron Classifer

Test Data used: Earthquake-Clean  
Number of Steps: 10,000  
alpha: 0.95

2) PerceptronClassifierEarthquakeNoisy

Classifier used: Perceptron Classifer

Test Data used: Earthquake-Noisy  
Number of Steps: 10,000  
alpha: 0.95

3) PerceptronClassifierEarthquakeNoisyDecaying

Classifier used: Perceptron Classifer

Test Data used: Earthquake-Noisy  
Number of Steps: 10,000  
alpha: 0

4) PerceptronClassifierHouseVotes

Classifier used: Perceptron Classifer

Test Data used: House-votes-84  
Number of Steps: 10,000  
alpha: 0.95

5) LogisticClassifierEarthquakeNoisy

Classifier used: Logistic Classifer

Test Data used: Earthquake-Noisy  
Number of Steps: 10,000  
alpha: 0.95

6) LogisticClassifierEarthquakeClean

Classifier used: Logistic Classifer

Test Data used: Earthquake-Clean  
Number of Steps: 10,000  
alpha: 0.95

7) LogisticClassifierEarthquakeNoisyDecaying

Classifier used: Logistic Classifer

Test Data used: Earthquake-Noisy  
Number of Steps: 10,000  
alpha: 0

8) LogisticClassifierHouseVotes

Classifier used: Logistic Classifer

Test Data used: House-votes-84  
Number of Steps: 10,000  
alpha: 0.95

9) LogisticClassifierHouseVotesDecaying

Classifier used: Logistic Classifer

Test Data used: House-votes-84  
Number of Steps: 10,000  
alpha: 0

10) PerceptronClassifierEarthquakeClean

Classifier used: Perceptron Classifer

Test Data used: Earthquake-Clean  
Number of Steps: 700  
alpha: 0.95

11) PerceptronClassifierEarthquakeNoisy

Classifier used: Perceptron Classifer

Test Data used: Earthquake-Noisy  
Number of Steps: 700  
alpha: 0.95

12) PerceptronClassifierHouseVotes

Classifier used: Perceptron Classifer

Test Data used: House-votes-84  
Number of Steps: 700  
alpha: 0.95