Morgan Baccus
CptS 315
Homework 3

Analytical Part

Q1.

a) No, the decision boundary for a voted perceptron can be nonlinear. For example, there can exist instances where the positive examples are skewed to one quadrant. This would make the decision boundary nonlinear.

b) Yes, the decision boundary for averaged perceptrons is linear. This is because it is essentially the same as a normal perceptron but with the weight vectors averaged to get a more even spread of data points.