Pattern Recognition
Quiz #1

1. Why does the class model change with the change of classification problem with the same dataset? **5**

2. For the following discriminant functions:
   $g_1(x) = -x_1 + \#x_2$
   $g_2(x) = \#x_1 + x_2 - 1$
   $g_3(x) = -x_2$
   (where # is replaced with the last digit of your ID)
   find the decision boundary equations for each pair of classes. **6**

3. Why do you need a margin for finding a solution region? How do you incorporate the margin in the weight update equations? **4**