HW #2
CPS 584

1. Use a three layer neural network to classify the two sets of 3-D data set. You should generate 50 samples for each data set based on the following criteria:

   Data set 1: Generate randomly a set of data set in three dimensions x1 x2, and x3. The data set has -0.5 <= x1 <= 0.5 , -0.5 <= x2 <= 0.5 , and x3=1

   Data set 2: Generate randomly a set of data where x1 and x2 are between two circles with radius of 3 and 4 having the center as the coordinate, and x3=1

   Plot your initial and final data sets. Plot error function as well. You should try your experience with different number of nodes in the first and second layer and then choose the network with the minimum number of nodes!
   Do not transfer your dataset to a new dimension!