Initially, when there is no neuron in the hidden layer, the average accuracy rate is 0.4 as plotted on the graph above. As the neuron number increases, the accuracy trend grows overall, although not strictly. The tests get all expected answer when there are 60 neurons in the hidden layer. This observation matches my thought. As the neuron number increases, more connections are built and the backpropagation process can work more properly. However the neural network algorithm is random, and the trainset is too small, there exists some unexpected decrease in the trend line.