

*****Part A*****

1. Optimal number of iterations (Sigmoid Function): 9
2. Optimal number of iterations (tanH Function): 5
3. Accuracy(Sigmoid Function): 91% (Outsample), 92% (Insample)
4. Accuracy(tanH Function): 85% (Outsample), 85% (InSample)

[Approximation Based on the observation]

*****Part B*****

1. Optimal number of iteration (Sigmoid Function): 1
2. Optimal number of iteration (tanH Function): 7
3. Accuracy(Sigmoid Function): 85% (Outsample), 87% (Insample)
4. Accuracy(tanH Function): 96% (Outsample), 97% (InSample)

[Approximation Based on the observation]

***** Conclusion *****

To my view Neural Network with softmax function with tanH as activator has performed the best.