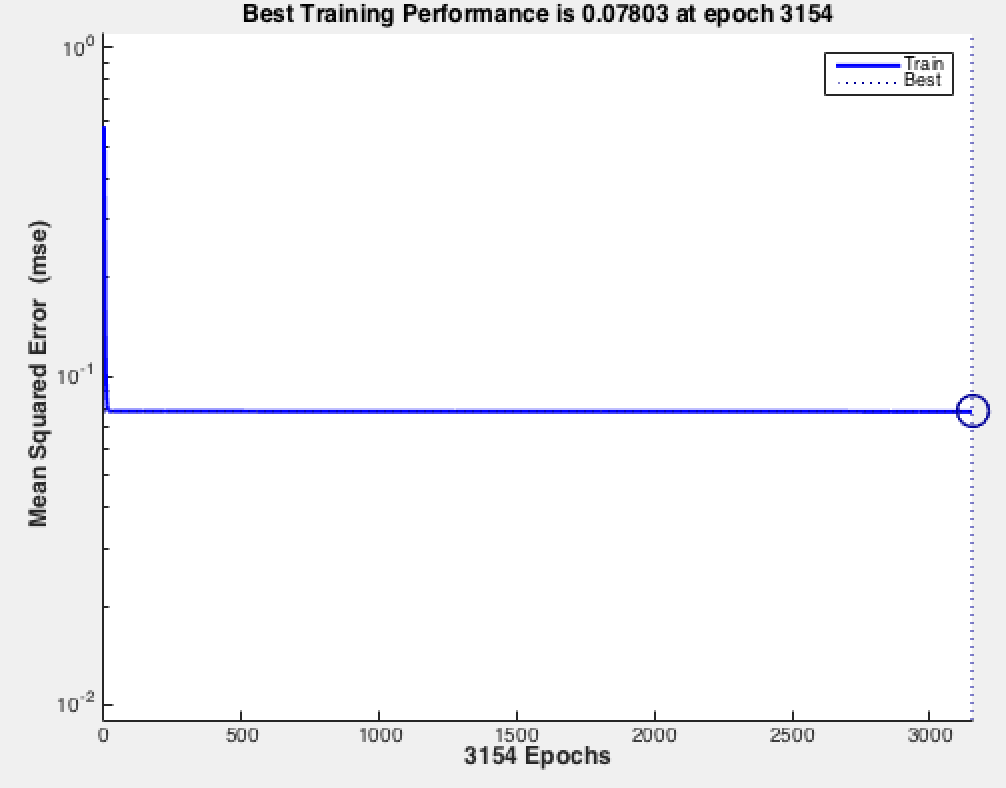
Charles Chen

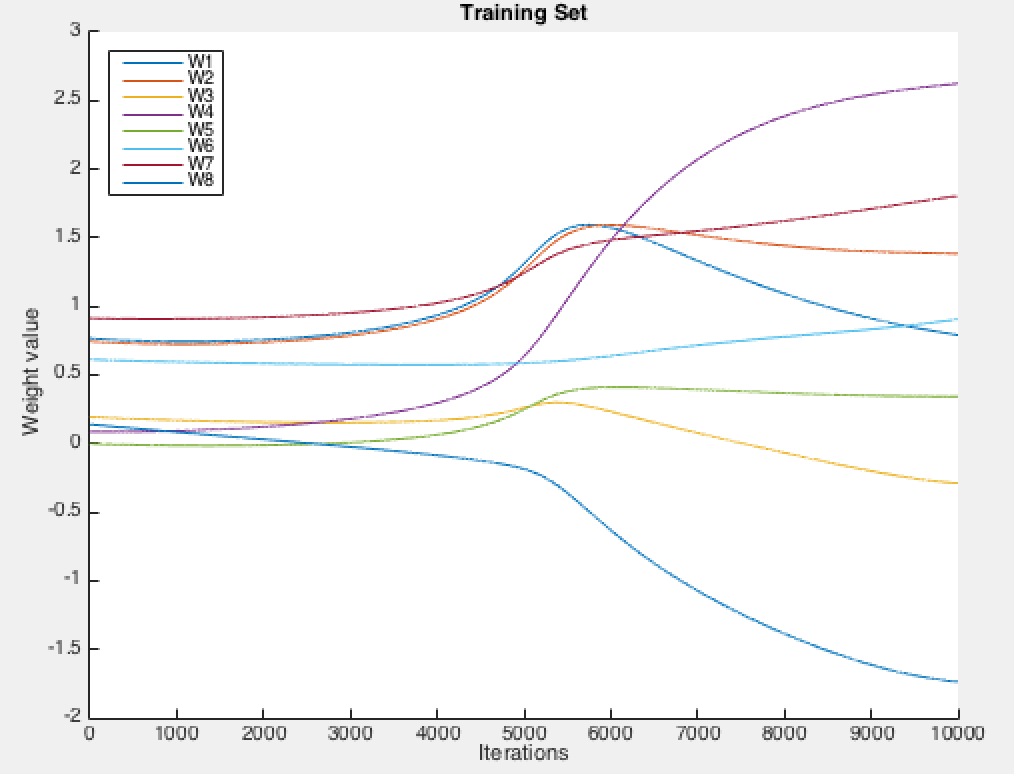
ECS 171

Assignment #2

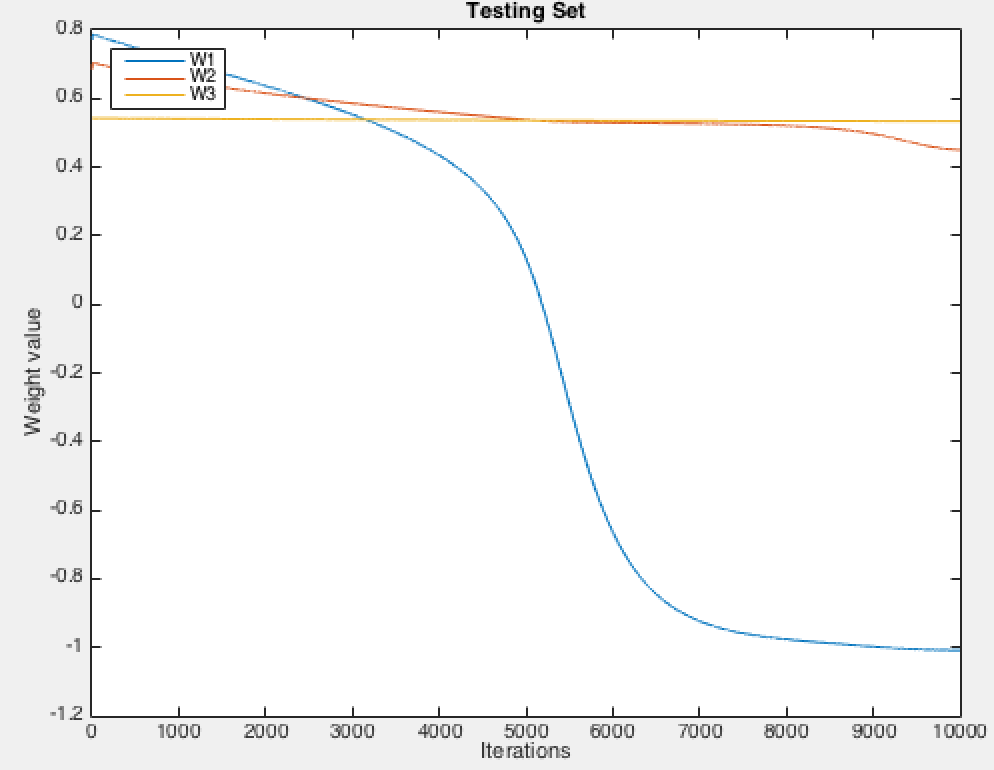
1. Error:



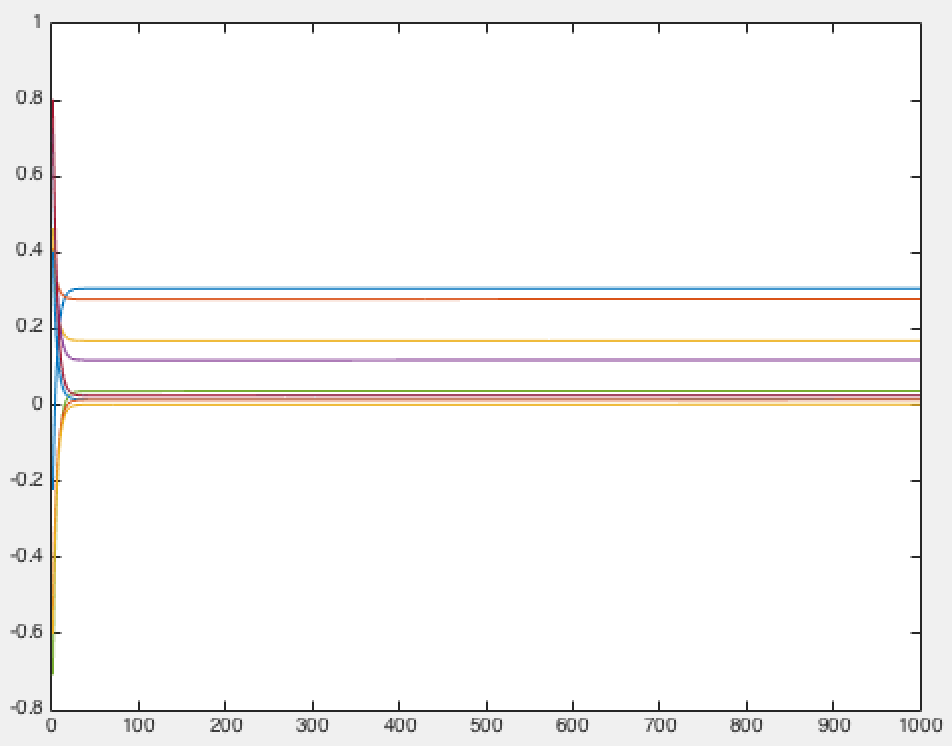
Weight, first node of hidden layer



Weights of output layer



Output:



2. Performance (Mean Square Error): 0.0667

Accuracy: 47.8437%

3.

4.

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1 | 2 | 3 |
| 3 | 0.0712 | 0.0756 | 0.0742 |
| 6 | 0.0640 | 0.0723 | 0.0729 |
| 9 | 0.0587 | 0.068 | 0.0679 |
| 12 | 0.0581 | 0.0676 | 0.0699 |

Optimal: 1 hidden layer, 12 nodes

Error seems to increase when more layers are added. Error decreases when more nodes are added to hidden layer.