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CSC578 HW2

**Question 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| Traning Set | | | |
| a | | b | c |
| 1 | | 0 | 1 |
|  |
| 0.3 |

Two neurons:

Therefore, error terms for the two neurons:

Therefore, correction terms:

New Weights:

|  |  |  |  |
| --- | --- | --- | --- |
| Traning Set | | | |
| a | | b | c |
| 0 | | 1 | 0 |
|  |
| 0.3 |

Two neurons:

Therefore, error terms for the two neurons:

Therefore, correction terms:

New Weights:

**Question 2:**

Therefore,

For each {} in traning examples, Do

Propagate the input forward through the newtwork:

1. Input the instance to the network and compute the output of every unit u in the network.

Propagate the errors backward through the network:

1. For each network output unit k, calculate its error term

1. For each hidden unit h, calculate its error term

1. Update each network weight

Where