

Question 2:

Effect due to Batch normalization and dropout

The given data was split into 80-20 for train and test.

Without Batch normalization and Drop Layer:

convergence time=19 sec accuracy=9.8 %

With Batch normalization and without Drop Layer:

convergence time=26 sec accuracy=66 %

Without Batch normalization and with Drop Layer:

convergence time=19 sec accuracy=10.14 %

With Batch normalization and Drop Layer:

convergence time=28 sec accuracy=75 %

Effect due to change in the activation function:

1) RELU

convergence time=28sec accuracy=76%

2)ELU

convergence time=28sec accuracy=76%

3)SIGMOID

convergence time=26sec accuracy=76%

4)TANH

convergence time=26sec accuracy=68.8%