

CS7015 : DEEP LEARNING

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## **REPORT OF PROGRAMMING ASSIGNMENT-1**

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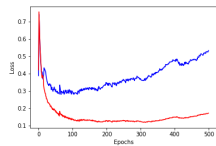
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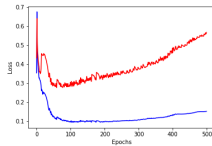
**Problem:-1, 2, 3, 4**

Red—> Validation Loss Blue—> Training Loss

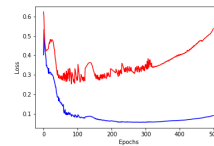
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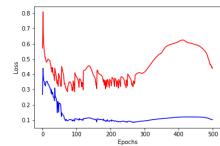
**Figure 1: 50**



**Figure 2: 100**

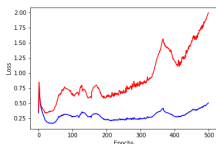


**Figure 3: 200**

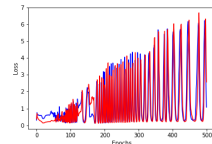


**Figure 4: 300**

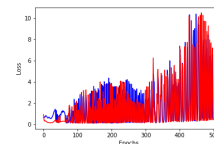
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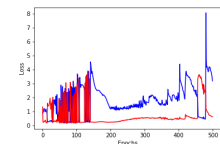
**Figure 5: 50**



**Figure 6: 100**



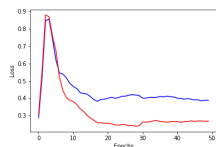
**Figure 7: 200**



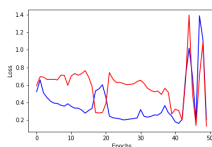
**Figure 8: 300**

**Figure 9:** Adam, BatchSize = 55000, LearningRate = 0.001, Epochs=5000.

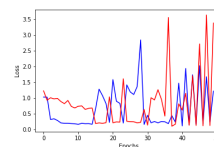
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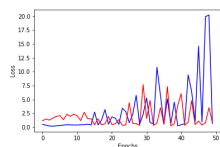
**Figure 10: 50**



**Figure 11: 100**

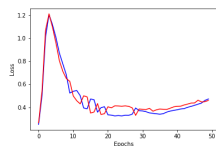


**Figure 12: 200**

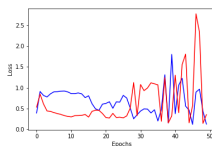


**Figure 13: 300**

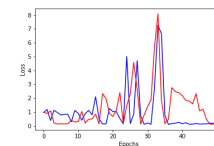
**Number of Hidden Layer:-4**



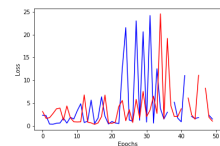
**Figure 14: 50**



**Figure 15: 100**



**Figure 16: 200**



**Figure 17: 300**

**Figure 18:** Adam, BatchSize = 55000, LearningRate = 0.001, Epochs=500.