Practical 3

**Mnist**

|  |  |  |
| --- | --- | --- |
| Name | Test Loss | Test Accuracy |
| SGD | 0.0791 | 0.9846 |
| RMSprop | 0.1541 | 0.9815 |
| Adagrad | 0.0972 | 0.9853 |
| Adadelta | 0.1001 | 0.9855 |
| Adam | 0.1350 | 0.9774 |
| Adamax | 0.1028 | 0.9861 |
| Nadam | 0.1310 | 0.9792 |

Adagrad is performing the best. Adamax has best test accuracy but its test loss is not the least.

Adagrad has minimum test loss and high accuracy therefore adagrad performs the best.

**CIFAR10**

* Test Loss: 14.5062
* Test Accuracy: 0.1

**CIFAR100**

* Test Loss: 4.6059
* Test Accuracy: 0.01

**Fashion MNIST**

* Test Loss: 14.5062
* Test Accuracy: 0.1