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 |

Among these optimiser the best accuracy we get is from Adamax but its test loss is not the least among all so with minimum test loss and high test accuracy we have Adagrad perform 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