**CSE512 – Assignment 2**

**Programming Report**

|  |  |  |  |
| --- | --- | --- | --- |
| Dataset | Algorithm | Training Error | Test Error |
| Breast Cancer Diagnosis | SVM (linear kernel) | 37.26% | N/A |
| Breast Cancer Diagnosis | SVM (RBF kernel) | 0 | N/A |
| MNIST | SVM (linear kernel) | 99% |  |
| MNIST | SVM (RBF kernel) | 99% |  |

**Readme –**

1. For executing the SVM linear on breast cancer data:

**python a2\_113070787.py --kernel linear --dataset BCD --train data/breast\_cancer\_data.csv --output new.txt**

1. For executing SVM RBF on BCD:

**python a2\_113070787.py --kernel rbf --dataset BCD --train data/breast\_cancer\_data.csv --output new.txt**

1. For executing SVM Linear on MNIST:

**python a2\_113070787.py --kernel linear --dataset MNIST --train data/breast\_cancer\_data.csv --output new.txt**