

## OUTPUT FOR EXP-1

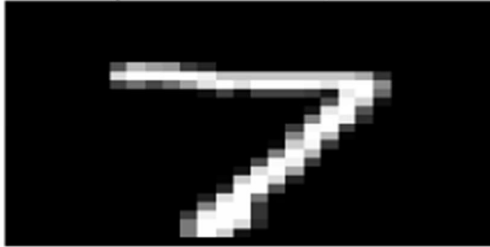
NAME: KEEERTHIKA S

ROLL NO: 220701127

EXP\_NO: 1

```
Downloading data from https://storage.googleapis.com/tensorflow/tf.keras-datasets/mnist.npz
11490434/11490434 0s 0us/step
/usr/local/lib/python3.11/dist-packages/keras/src/layers/core/dense.py:87: UserWarning: Do not pass an 'input_shape' argument to a layer. When using
super().__init__(activity_regularizer=activity_regularizer, **kwargs)
Epoch 1/10 4s 15ms/step - accuracy: 0.7990 - loss: 0.7140 - val_accuracy: 0.9495 - val_loss: 0.1838
Epoch 2/10 4s 20ms/step - accuracy: 0.9548 - loss: 0.1682 - val_accuracy: 0.9618 - val_loss: 0.1274
Epoch 3/10 4s 12ms/step - accuracy: 0.9718 - loss: 0.0971 - val_accuracy: 0.9684 - val_loss: 0.1091
Epoch 4/10 3s 12ms/step - accuracy: 0.9806 - loss: 0.0686 - val_accuracy: 0.9705 - val_loss: 0.0958
Epoch 5/10 3s 13ms/step - accuracy: 0.9863 - loss: 0.0487 - val_accuracy: 0.9750 - val_loss: 0.0859
Epoch 6/10 5s 13ms/step - accuracy: 0.9903 - loss: 0.0376 - val_accuracy: 0.9739 - val_loss: 0.0808
Epoch 7/10 3s 12ms/step - accuracy: 0.9917 - loss: 0.0293 - val_accuracy: 0.9726 - val_loss: 0.0937
Epoch 8/10 2s 12ms/step - accuracy: 0.9941 - loss: 0.0222 - val_accuracy: 0.9772 - val_loss: 0.0770
Epoch 9/10 3s 15ms/step - accuracy: 0.9963 - loss: 0.0158 - val_accuracy: 0.9779 - val_loss: 0.0787
Epoch 10/10 5s 12ms/step - accuracy: 0.9976 - loss: 0.0115 - val_accuracy: 0.9781 - val_loss: 0.0817
113/113 1s 38ms/step - accuracy: 0.9765 - loss: 0.0782
Test results - Loss: 0.07800122520805196 - Accuracy: 0.9900000190734863
1/1 0s 71ms/step
```

Sample 1 - Predicted: 7, Actual: 7



Sample 2 - Predicted: 2, Actual: 2



Sample 3 - Predicted: 1, Actual: 1



Sample 4 - Predicted: 0, Actual: 0



Sample 5 - Predicted: 4, Actual: 4

