Clothing Classification on mnist dataset

Introduction

This is a self project which predicts the class of the clothes. It is a computer vision project, which uses deep learning models to classify. The models are implemented using tensorflow library.

Model Architecture

I have used a sequential model, which have 2 convolution layers, 3 batch normalization, 1 max pooling, 1 dropout, and 1 dense layer

The model summary looks like:-

```
Model: "sequential"
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 Layer (type)                Output Shape              Param #
=================================================================
 conv2d (Conv2D)             (None, 26, 26, 32)        320

 batch_normalization (Batch  (None, 26, 26, 32)        128
 Normalization)

 conv2d_1 (Conv2D)           (None, 24, 24, 64)        18496

 batch_normalization_1 (Bat  (None, 24, 24, 64)        256
 chNormalization)

 max_pooling2d (MaxPooling2  (None, 12, 12, 64)        0
 D)

 dropout (Dropout)           (None, 12, 12, 64)        0

 flatten (Flatten)           (None, 9216)              0

 dense (Dense)               (None, 128)               1179776

 batch_normalization_2 (Bat  (None, 128)               512
 chNormalization)
...
Total params: 1200778 (4.58 MB)
Trainable params: 1200330 (4.58 MB)
Non-trainable params: 448 (1.75 KB)
```
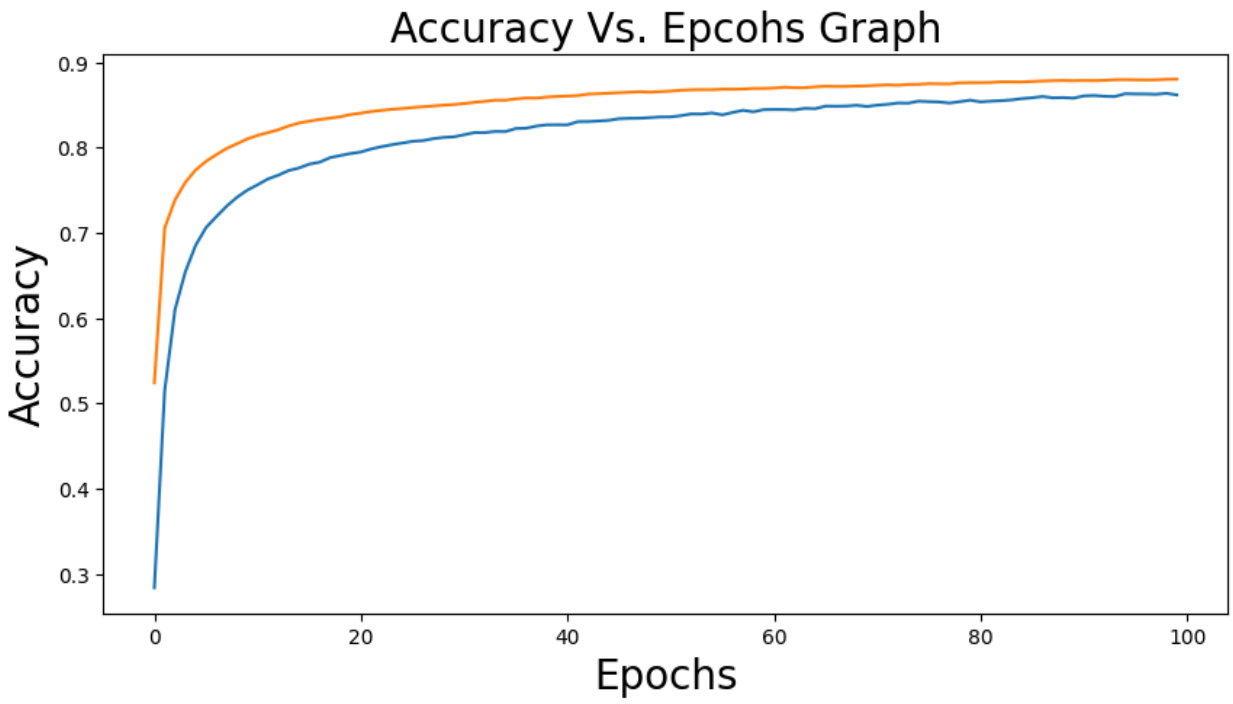
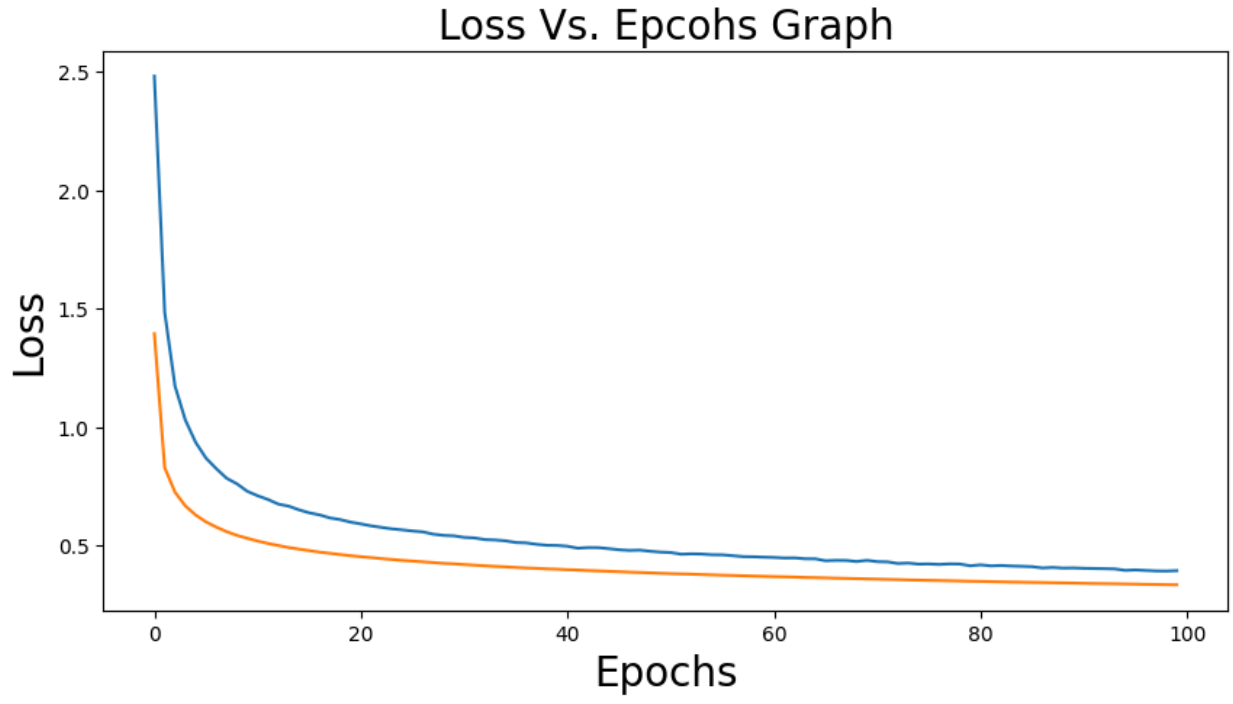

Plots





Accuracy of the model is 0.8804