TRAIN THE MODEL

Team ID	**PNT2022TMID50703**
Project Name	**A Novel Method for Handwritten Digit Recognition System**

Train the model:

Fit: Functions used to train a deep learning neural network.

```
model.fit(X_train, y_train, validation_data=(X_test, y_test), epochs=1)
```

```
1875/1875 [==============================] - 199s 106ms/step - loss: 0.2783 - accuracy: 0.9516 -
val_loss: 0.0867 - val_accuracy: 0.9726
<keras.callbacks.History at 0x7fca6d143d90>
```

Arguments: steps_per_epoch: it specifies the total number of steps taken from the generator as soon as one epoch is finished and the next epoch has started. Calculate value of steps_per_epoch as the total number of samples in your dataset divided by the batch size.

Epochs: An integer and number of epochs the train and model.

Validation_data:

- An inputs and targets list
- A generator
- Inputs, targets, and sample_weights list which can be used to evaluate the loss and metrics for any model after any epoch has ended.

Validation_steps:

- Only if the validation_ data is a generator then only this argument can be used.
- It specifies the total number of steps taken from the generator before it is stopped at every epoch and its value is calculated as the total number of validation data points in dataset divided by the validation batch size.