Train The Model

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Now, let us train our model with our image dataset. The model is trained for 20 epochs and after every epoch, the current model state is saved if the model has the least loss encountered till that time. We can see that the training loss decreases in almost every epoch till 20 epochs and probably there is further scope to improve the model.

fit_generator functions used to train a deep learning neural network
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. We can calculate the 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 we want to train our model for.

- validation_data can be either:
  - 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 your dataset divided by the validation batch size.

```
## Fitting the model

classifier.fit_generator(
        generator=x_train,steps_per_epoch = len(x_train),
        epochs=20, validation_data=x_test,validation_steps = len(x_test))# No of images in test set
```