Train The Model

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Now, let us train our model with our image dataset. The model is trainedfor20epochsandaftereveryepoch,thecurrentmodelstateissavedifthemodel has the least loss encountered till that time. We can see that thetraining loss decreases in almost every epoch till 20 epochs and probablythereisfurtherscopetoimprovethemodel.

fit_generatorfunctionsusedtotrainadeeplearningneuralnetwork
Arguments:

- steps_per_epoch:itspecifiesthetotalnumberofstepstaken from the generator as soon as one epoch is finished and thenextepochhasstarted.Wecancalculatethevalue of steps_per_epochasthetotalnumberofsamplesinyourdata setdividedbythebatchsize.

- Epochs:anintegerandnumberofepochswewanttotrainourmodelfor.

- validation_datacanbeeither:
  - aninputsandtargetslist
  - agenerator
  - inputs,targets,andsample_weightslistwhichcanbeusedto evaluate thelossandmetricsforanymodelafteranyepochhasended.
- validation_steps:onlyifthevalidation_dataisageneratorthen onlythisargument canbeused.Itspecifiesthetotalnumberofstepstakenfromthegeneratorbeforeitis stoppedateveryepochanditsvalueiscalculatedasthetotalnumberofvalidationdatapoints inyourdatasetdividedbythevalidationbatchsize.

```
## 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
```