

import the
imagedatagenerator
library

```
from keras.preprocessing.image import imagedatagenerator
```

image data agumentation

#setting parameter for image data agumentation to the traing data

```
train_datagen =  
Imagedatagenerator(rescale=1./255,shear_range=0.2,zoom_range=0.2,h  
orizontal_flip=True)
```

#Image data aumentation to the testing data

```
test_datagen=Imagedatagenerator(rescale=1./255)
```

loading our data and performing data agumentation

#performing data agumentation to train data

```
x_train =  
train_datagen.flow_from_directory('../data/train_set',target_size=(64,6  
4),batch_size=5,color_mode='rgb',class_mode='categorical')
```

#performing data agu,mentation to test data

```
x_test =  
test_datagen.flow_from_directory('../data/test_set',target_size=(64,64),  
batch_size=5,color_mode='rgb',class_mode='categorical')
```

Found 742 images belonging to 4 classes.

Found 198 images belonging to 4 classes.