



```
In [3]: import tensorflow as tf
```

```
In [4]: #import keras library
import keras
```

```
In [5]: #import ImageDataGenerator class from keras
from keras.preprocessing.image import ImageDataGenerator
```

```
In [8]: #define the parameters /arguments for ImageDataGenerator class
train_datagen=ImageDataGenerator(rescale=1./255,
                                shear_range=0.2,
                                rotation_range=180,
                                zoom_range=0.2,
                                horizontal_flip=True)

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

```
In [13]: train_datagen = ImageDataGenerator(rescale=1./255,
                                shear_range=0.2,
                                zoom_range=0.2,
                                horizontal_flip=True)
```

```
In [21]: #: Applying ImageDataGenerator functionality to trainset
x_train = train_datagen.flow_from_directory(r'C:\Users\822619104301.AITCS\Desktop\notebook\Dataset\train_set',
                                           target_size = (128,128),
                                           batch_size = 32,
                                           class_mode = 'binary')
```

train_datagen = ImageDataGenerator(rescale=1/255,
shear_range=0.2,
zoom_range=0.2,
horizontal_flip=True)

[21]: *#: Applying ImageDataGenerator functionality to trainset*

```
x_train = train_datagen.flow_from_directory(r'C:\Users\822619104301.AITCS\Desktop\notebook\Dataset\train_set',  
                                           target_size = (128,128),  
                                           batch_size = 32,  
                                           class_mode = 'binary')
```

Found 436 images belonging to 2 classes.

[22]: *#: Applying ImageDataGenerator functionality to testset*

```
x_test = test_datagen.flow_from_directory(r'C:\Users\822619104301.AITCS\Desktop\notebook\Dataset\test_set',  
                                          target_size = (128,128),  
                                          batch_size = 32,  
                                          class_mode = 'binary')
```

Found 121 images belonging to 2 classes.

[]: