

# EMERGING METHODS OF EARLY DETECTION OF FOREST FIRE

## Applying Image data generator to train and test dataset

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Project name	Emerging methods for early detection of forest fire

The image Data Generator class has three methods,

1.flow(),

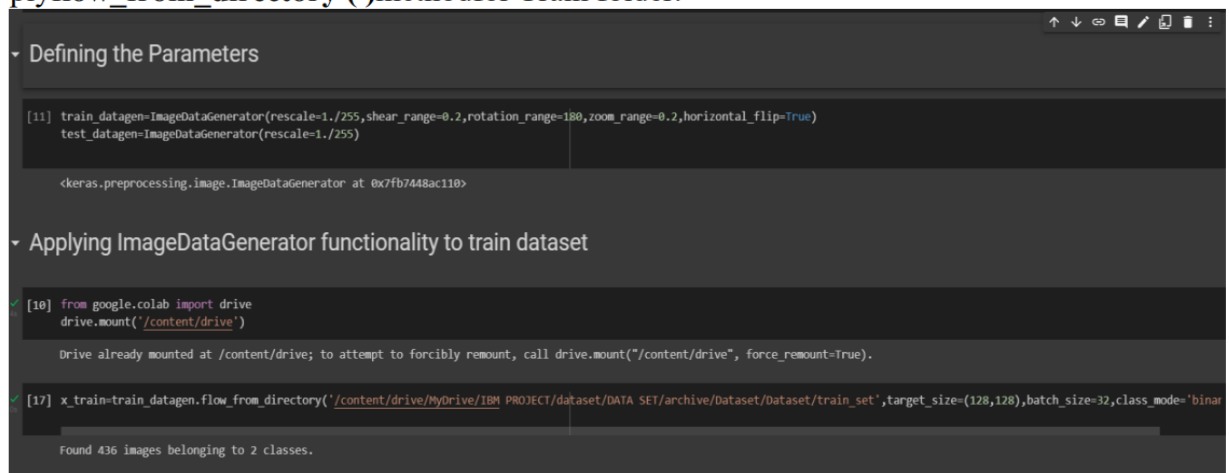
2.flow\_from\_directory()

3.flow\_from\_dataframe() to read the images from a big numpy array and folders containing images.

4.flow\_from\_directory() expects at least one directory path.

### APPLYING ImageDataGenerator to train dataset:

ply **flow\_from\_directory ( )** method for Train folder.



```
Defining the Parameters

[11] 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)

<keras.preprocessing.image.ImageDataGenerator at 0x7fb7448ac110>

Applying ImageDataGenerator functionality to train dataset

[10] from google.colab import drive
     drive.mount('/content/drive')

Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).

[17] x_train=train_datagen.flow_from_directory('/content/drive/MyDrive/IBM PROJECT/dataset/DATA SET/archive/Dataset/Dataset/train_set',target_size=(128,128),batch_size=32,class_mode='binar

Found 436 images belonging to 2 classes.
```

# EMERGING METHODS OF EARLY DETECTION OF FOREST FIRE

## APPLYING ImageDataGenerator to test dataset:

Applying the `flow_from_directory()` method for test folder.

```
Applying ImageDataGenerator functionality to test dataset

x_test=test_datagen.flow_from_directory('/content/drive/MyDrive/IBM PROJECT/dataset/DATA SET/archive/Dataset/Dataset/test_set',target_size=(128,128),batch_size=32,class_mode='binary')

Found 121 images belonging to 2 classes.
```