

```

test_dir=r'C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_
System_For_Disease_Prediction\Dataset Plant Disease\fruit-dataset\fruit-dataset\test'

import tensorflow as tf

from tensorflow import keras

from tensorflow.keras.preprocessing.image import ImageDataGenerator

model =
tf.keras.models.load_model(r'C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommen
dation_System_For_Disease_Prediction\Dataset Plant Disease\fruitdata.h5')

test_datagen_1=ImageDataGenerator(rescale=1)

test_generator_1=test_datagen_1.flow_from_directory(

    test_dir,

    target_size=(128,128),

    batch_size=20,

    class_mode='categorical'

)

```

Found 1686 images belonging to 6 classes.

```

import numpy as np

from tensorflow.keras.models import load_model

from tensorflow.keras.preprocessing import image

img=image.load_img(r"C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation
_System_For_Disease_Prediction\Dataset Plant Disease\fruit-dataset\fruit-
dataset\train\Corn_(maize)__healthy\9faacf6a-f638-435a-8994-f1418b332199__R.S_HL 8102 copy
2.jpg")

img

```

```

img=image.load_img(r"C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation
_System_For_Disease_Prediction\Dataset Plant Disease\fruit-dataset\fruit-
dataset\train\Corn_(maize)__healthy\9faacf6a-f638-435a-8994-f1418b332199__R.S_HL 8102 copy
2.jpg",target_size=(128,128))

x=image.img_to_array(img)

x=np.expand_dims(x,axis=0)

y=np.argmax(model.predict(x),axis=1)

index=['Apple__Black_rot', 'Apple_healthy', 'Corn(maize)__healthy',
'Corn(maize)__Northern_Leaf_Blight', 'Peach_Bacterial_spot', 'Peach__healthy']

```

```
index[y[0]]
```

```
1/1 [=====] - 0s 57ms/step
```

```
'Corn_(maize)___Northern_Leaf_Blight'
```

```
model.evaluate(test_generator_1,steps=50)
```

```
50/50 [=====] - 4s 76ms/step - loss: 1036.1377 - accuracy: 0.6220
```

```
[1036.1376953125, 0.621999979019165]
```