

```

import tensorflow as tf
from tensorflow import keras
from tensorflow.keras.preprocessing.image import ImageDataGenerator

```

In [3]:

```

model = tf.keras.models.load_model(r'C:\Users\VENGAT\fruitdata.h5')

```

In [4]:

```

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.

In [5]:

```

import numpy as np
from tensorflow.keras.models import load_model
from tensorflow.keras.preprocessing import image

```

In [6]:

```

img=image.load_img(r"C:\Users\VENGAT\Desktop\Data\Dataset Plant
Disease\fruit-dataset\fruit-dataset\train\Corn_(maize)___healthy\9faacf6a-
f638-435a-8994-f1418b332199___R.S_HL_8102_copy_2.jpg")

```

In [7]:

```

img

```

Out[7]:

In [8]:

```

img=image.load_img(r"C:\Users\VENGAT\Desktop\Data\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 [=====] - 7s 7s/step

```

Out[8]:

```

'Corn_(maize)___Northern_Leaf_Blight'

```

In [9]:

```

model.evaluate(test_generator_1,steps=50)
50/50 [=====] - 27s 495ms/step - loss: 666.1144 -
accuracy: 0.6230

```

Out[9]:

```

[666.1144409179688, 0.6230000257492065]

```

In []: