

Import the ImageDataGenerator library

```
from keras.preprocessing.image import ImageDataGenerator
```

Configure ImageDataGenerator Class

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

Apply Image DataGenerator Functionality To Trainset And Testset

```
x_train = train_datagen.flow_from_directory(
    r'/content/drive/MyDrive/Project/Dataset/TRAIN_SET',
    target_size=(64, 64), batch_size=32, color_mode='rgb', class_mode='categorical')
x_test = test_datagen.flow_from_directory(
    r'/content/drive/MyDrive/Project/Dataset/TEST_SET',
    target_size=(64, 64), batch_size=32, color_mode='rgb', class_mode='categorical')
```

```
↳ Found 3838 images belonging to 5 classes.
   Found 280 images belonging to 5 classes.
```

```
print(x_train.class_indices)
```

```
{'APPLES': 0, 'BANANA': 1, 'ORANGE': 2, 'PINEAPPLE': 3, 'WATERMELON': 4}
```

```
print(x_test.class_indices)
```

```
{'APPLE': 0, 'BANANA': 1, 'ORANGE': 2, 'PINEAPPLE': 3, 'WATERMELON': 4}
```

```
from collections import Counter as c
c(x_train .labels)
```

```
Counter({0: 913, 1: 1306, 2: 964, 3: 240, 4: 415})
```

```
from collections import Counter as c
c(x_test .labels)
```

```
Counter({0: 82, 1: 48, 2: 55, 3: 35, 4: 60})
```

Importing The Model Building Libraries