

```
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

```
!unzip '/content/drive/MyDrive/fruits.zip'
```

```
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_105.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_109.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_113.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_117.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_121.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_125.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_129.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_13.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_133.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_137.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_141.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_145.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_149.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_153.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_157.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_161.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_165.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_169.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_17.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_173.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_177.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_181.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_185.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_189.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_193.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_197.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_201.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_205.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_209.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_21.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_213.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_217.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_221.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_225.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_229.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_233.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_237.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_241.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_245.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_249.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_25.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_253.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_257.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_261.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_265.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_269.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_273.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_277.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_281.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_285.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_289.jpg
```

```

inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_289.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_29.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_293.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_297.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_301.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_305.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_309.jpg
inflating: fruits-360-original-size/Validation/zucchini_dark_1/r0_313.jpg

```

```
# Import necessary library
```

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

```
# Data augmentation on training variable
```

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

```
# Data augmentation on testing variable
```

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

```
xtrain = train_datagen.flow_from_directory('/content/fruits-360-original-size/Training',
                                           target_size=(64,64),
                                           class_mode='categorical',
                                           batch_size=100)
```

```
Found 6231 images belonging to 24 classes.
```

```
xtest = test_datagen.flow_from_directory('/content/fruits-360-original-size/Test',
                                         target_size=(64,64),
                                         class_mode='categorical',
                                         batch_size=100)
```

```
Found 3110 images belonging to 24 classes.
```

```
print(xtrain.class_indices)
```

```
{'apple_6': 0, 'apple_braeburn_1': 1, 'apple_crimson_snow_1': 2, 'apple_golden_1': 3,
```

```
< [REDACTED] >
```

```
print(xtest.class_indices)
```

```
{'apple_6': 0, 'apple_braeburn_1': 1, 'apple_crimson_snow_1': 2, 'apple_golden_1': 3,
```

```
< [REDACTED] >
```