Image Preprocessing
Configure Image Data Generator Class

Date	30 October 2022
Team ID	PNT2022TMID04947
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts

❖ Image Data Generator class is instantiated and the configuration for the types of data augmentation

❖ There are five main types of data augmentation techniques for image data; specifically:

  ❖ Image shifts via the width_shift_range and height_shift_range arguments.

  ❖ The image flips via the horizontal_flip and vertical_flip arguments.

  ❖ Image rotations via the rotation_range argument.

  ❖ Image brightness via the brightness_range argument.

  ❖ Image zoom via the zoom_range argument.

  ❖ An instance of the Image Data Generator class can be constructed for train and test.

```
[ ]  #setting parameter for Image Data agumentation to the training data
     train_datagen = ImageDataGenerator(rescale=1./255,shear_range=0.2,zoom_range=0.2,horizontal_flip=True)
     #Image Data agumentation to the testing data
     test_datagen=ImageDataGenerator(rescale=1./255)
```