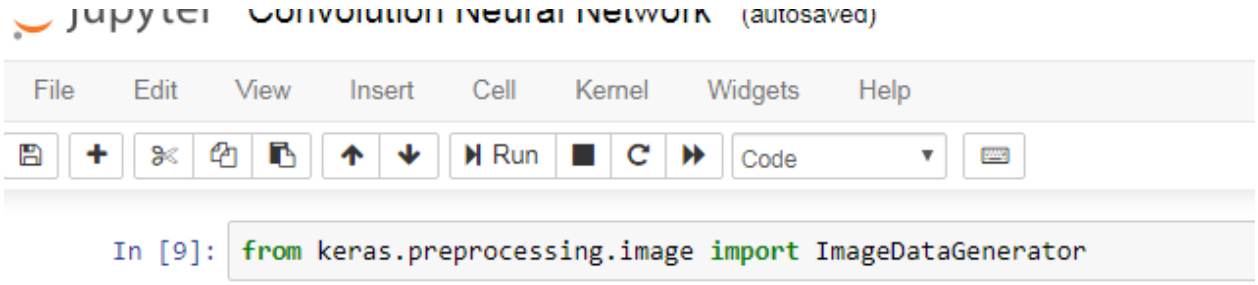
Project Development Phase
Sprint 1

Date	7 November 2022
Team ID	PNT2022TMID20581
Project Name	Project - AI-Powered Nutrition Analyzer For Fitness Enthusiasts

❖ Import the library



❖ Define the parameters /arguments for 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)
```

Note: The ImageDataGenerator transforms each image in the batch by a series of random translations, these translations are based on the arguments

❖ Applying ImageDataGenerator functionality to trainset and testset

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

```
x_train = train_datagen.flow_from_directory(r'E:\dataset\training_set',target_size=(64,64),batch_size=32,class_mode='categorical')
x_test = train_datagen.flow_from_directory(r'E:\dataset\test_set',target_size=(64,64),batch_size=32,class_mode='catagorical')
```

```
Found 8000 images belonging to 2 classes.
Found 2000 images belonging to 2 classes.
```

In [1]:
```
from keras.preprocessing.image import ImageDataGenerator
```

In [2]:
```
#setting parameter for Image Data agumentation to the training data
train_datagen = ImageDataGenerator(rescale=1./255,shear_range=0.2,zoom_range=0.2,
#Image Data agumentation to the testing data
test_datagen=ImageDataGenerator(rescale=1./255)
```

In [3]:
```
#performing data agumentation to train data
x_train = train_datagen.flow_from_directory(r'E:\IBM_Project\TRAIN_SET',target_si
#performing data agumentation to test data
x_test = test_datagen.flow_from_directory(r'E:\IBM_Project\TEST_SET',target_size=
```

```
Found 2626 images belonging to 5 classes.
Found 1055 images belonging to 5 classes.
```

In [ ]:
```
```