"import numpy as np#used for numerical analysis\n",

"import tensorflow #open source used for both ML and DL for computation\n",

"from tensorflow.keras.models import Sequential #it is a plain stack of layers\n",

"from tensorflow.keras import layers #A layer consists of a tensor-in tensor-out computation function\n",

"#Dense layer is the regular deeply connected neural network layer\n",

"from tensorflow.keras.layers import Dense,Flatten\n",

"#Faltten-used fot flattening the input or change the dimension\n",

"from tensorflow.keras.layers import Conv2D,MaxPooling2D,Dropout #Convolutional layer\n",

"#MaxPooling2D-for downsampling the image\n",

"from keras.preprocessing.image import ImageDataGenerator"

"#setting parameter for Image Data agumentation to the training data\n",

"train\_datagen = ImageDataGenerator(rescale=1./255,shear\_range=0.2,zoom\_range=0.2,horizontal\_flip=True)\n",

"#Image Data agumentation to the testing data\n",

"test\_datagen=ImageDataGenerator(rescale=1./255)"

"#performing data agumentation to train data\n",

"x\_train = train\_datagen.flow\_from\_directory(\n",

" r'C:\\Users\\Harithan\\IBM\_Proj\\Dataset\\TRAIN\_SET',\n",

" target\_size=(64, 64),batch\_size=5,color\_mode='rgb',class\_mode='sparse')\n",

"#performing data agumentation to test data\n",

"x\_test = test\_datagen.flow\_from\_directory(\n",

" r'C:\\Users\\Harithan\\IBM\_Proj\\Dataset\\TEST\_SET',\n",

" target\_size=(64, 64),batch\_size=5,color\_mode='rgb',class\_mode='sparse') "