```
1
2  from google.colab import drive
3  drive.mount('/content/drive')
4  Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).
5  from tensorflow.keras.layers import Dense, Flatten, Input
6  from tensorflow.keras.models import Model
7  from tensorflow.keras.preprocessing import image
8  from tensorflow.keras.preprocessing.image import ImageDataGenerator, load_img
9  from tensorflow.keras.applications.vgg16 import VGG16, preprocess_input
10 from glob import glob
11 import numpy as np
12 import matplotlib.pyplot as plt
13 imageSize = [224, 224]
14
15 trainPath = r"/content/drive/MyDrive/dataset1/body/training"
16
17 testPath = r"/content/drive/MyDrive/dataset1/body/validation"
18 # adding preprocessing layers to the front of vgg
19
20 vgg = VGG16(input_shape=imageSize + [3], weights='imagenet',include_top=False)
21 Downloading data from https://storage.googleapis.com/tensorflow/keras-applications/vgg16/vgg16_weights_tf_dim_ordering_tf_kernels_notop.h5
22 58889256/58889256 [==============================] - 0s 0us/step
23 # don't train existing weights
24 for layer in vgg.layers:
25   layer.trainable = False
26 # our layers - you can add more if you want
27 x = Flatten()(vgg.output)
28 prediction = Dense(3, activation='softmax')(x)
29 # create a model object
30 model = Model(inputs=vgg.input, outputs=prediction)
31 # view the structure of the model
32 model.summary()
```