1)

import tensorflow as tf

from tensorflow.keras import layers,models

def create\_mlp(input\_size,hidden\_sizes,output\_size):

model=models.Sequential()

model.add(layers.InputLayer(input\_shape=(input\_size,)))

for hidden\_size in hidden\_sizes:

model.add(layers.Dense(hidden\_size,activation="relu"))

model.add(layers.Dense(output\_size,activation="softmax"))

return model

if \_\_name\_\_=="\_\_main\_\_":

input\_size=10

hidden\_sizes=[64,32]

output\_size=2

mlp\_model=create\_mlp(input\_size,hidden\_sizes,output\_size)

mlp\_model.summary()

**OUTPUT**

Model: "sequential"

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Layer (type) Output Shape Param #

=================================================================

dense (Dense) (None, 64) 704

dense\_1 (Dense) (None, 32) 2080

dense\_2 (Dense) (None, 2) 66

=================================================================

Total params: 2850 (11.13 KB)

Trainable params: 2850 (11.13 KB)

Non-trainable params: 0 (0.00 Byte)