

In [1]: **▶** *# ATTENTION: Please do not alter any of the provided code in the exercise. Or*  
*# ATTENTION: Please do not add or remove any cells in the exercise. The grade*  
*# ATTENTION: Please use the provided epoch values when training.*

```
# Import all the necessary files!
import os
import tensorflow as tf
from tensorflow.keras import layers
from tensorflow.keras import Model
from os import getcwd
```

In [2]: **▶** `path_inception = f"{getcwd()}/../tmp2/inception_v3_weights_tf_dim_ordering_tf`

```
# Import the inception model
from tensorflow.keras.applications.inception_v3 import InceptionV3

# Create an instance of the inception model from the local pre-trained weights
local_weights_file = path_inception

pre_trained_model = InceptionV3(input_shape = (150, 150, 3),
                                include_top = False, # Remove dense layer before
                                weights = None) # Don't use default weights
```

```
pre_trained_model.load_weights(local_weights_file)
```

```
# Make all the layers in the pre-trained model non-trainable
for layer in pre_trained_model.layers:
    layer.trainable = False
```

*# Expected Output is extremely large, but should end with:*

```
#batch_normalization_v1_281 (Batch Normalization) (None, 3, 3, 192) 576 conv2d_281/
#
#activation_273 (Activation) (None, 3, 3, 320) 0 batch_normalization_v1_281
#
#mixed9_1 (Concatenate) (None, 3, 3, 768) 0 activation_273
#
#concatenate_5 (Concatenate) (None, 3, 3, 768) 0 activation_273
#
#activation_281 (Activation) (None, 3, 3, 192) 0 batch_normalization_v1_281
#
#mixed10 (Concatenate) (None, 3, 3, 2048) 0 activation_281
#
#
#
#=====
#Total params: 21,802,784
#Trainable params: 0
```