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Assignment 1.A

**1. Determine the total number of parameters and multiplications for the model MyModel in the code skeleton.**

Parameters:

Total number of parameters for Single layer= ML (ML-1 +1) ; 1<= L<=3

Total number of parameters = 10(0+1) + 10 (10+1) + 1(10+1) = 131

Multiplications:

Number of Multiplications for Single Layer= ML \* ML-1

Total number of Multiplications = 10(0) + 10 (10) + 1(10) = 110

**2. Determine the sizes of all hidden representations in the DNNs used in the**

**code skeleton.**

Size of hidden layer: 20

**3. What activation function is used in these DNNs. Could other activation functions be used? Justify your answer.**

Activation function used is tangents hyperbolics (tf.nn.tanh()).

Sigmoid activation is widely used in Convolutional Neural Networks, since the calculation is simple.