Car data neural network analysis

Raw Data Pre-process Strategy:

If the value is numeric, it needs to be standardized, which means subtracting the mean from each of the values and dividing by the standard deviation
If the value is categorical or nominal, it needs to be converted to numerical values.

The best set of parameters:
the learning rate, it should between 0~1: 0.1
the maximum number of iterations: 300
the number of hidden layers: 7
the number of neurons in hidden layer: 2
the percentage of data that used for training(1~99): 80

The results in terms of accuracy: 72.28%

Run code and the result is in the next page:

```
************************Print results***********************
Layer  0 (Input Layer):
         Neuron  0 weights:  [-2.03293107 -1.8943891 ]

         Neuron  1 weights:  [-0.4960778   1.42177158]

         Neuron  2 weights:  [ 0.9685152  -1.81449208]

         Neuron  3 weights:  [ 0.26667413  0.17820879]

         Neuron  4 weights:  [ 0.69171006 -0.87905138]

         Neuron  5 weights:  [-1.25470021  2.32740837]

Layer  1 (1th hidden layer):
         Neuron  0 weights:  [-0.52368542 -0.14760666]

         Neuron  1 weights:  [ 1.77893898  0.03647441]

Layer  2 (2th hidden layer):
         Neuron  0 weights:  [ 0.10085129  0.98866   ]

         Neuron  1 weights:  [-1.67242156  0.36077793]

Layer  3 (3th hidden layer):
         Neuron  0 weights:  [-0.72803667 -0.4296121 ]

         Neuron  1 weights:  [ 2.1161092   0.02074227]

Layer  4 (4th hidden layer):
         Neuron  0 weights:  [-1.90139829 -0.51549924]

         Neuron  1 weights:  [ 0.01604031  0.86387807]

Layer  5 (5th hidden layer):
         Neuron  0 weights:  [-0.32111306  1.01445382]

         Neuron  1 weights:  [-0.61202969  0.51958426]

Layer  6 (6th hidden layer):
         Neuron  0 weights:  [ 1.36986459  0.29894887]

         Neuron  1 weights:  [ 0.52098098  1.45904829]

Layer  7 (Last hidden layer):
         Neuron  0 weights:  [-1.80812097]

         Neuron  1 weights:  [-0.52641255]

Accuracy on testing data is  72.28260869565217
```