**Pre-processing Strategy**:

Numerical data has been scaled using Gaussian distribution

Categorical data has been converted to numerical based on the index of unique array of the data.

**Best Set Of Parameters:**

We ran the back-propagation algorithm for different no of hidden layers with different number of neurons. The performance was better for more no of layers with optimal number of neurons. Log files have been attached for reference. We assumed that output layer has a single neuron. The output was better if more percentage of data was given for testing and the error tolerance is lesser value.

**Accuracy:**

|  |  |  |
| --- | --- | --- |
| **DataSet** | **Training** | **Testing** |
| **Iris** | **83%** | **89%** |
| **Housing** | **65%** | **60%** |
| **Adult** | **91%** | **91%** |