

SOFT COMPUTING PROJECT



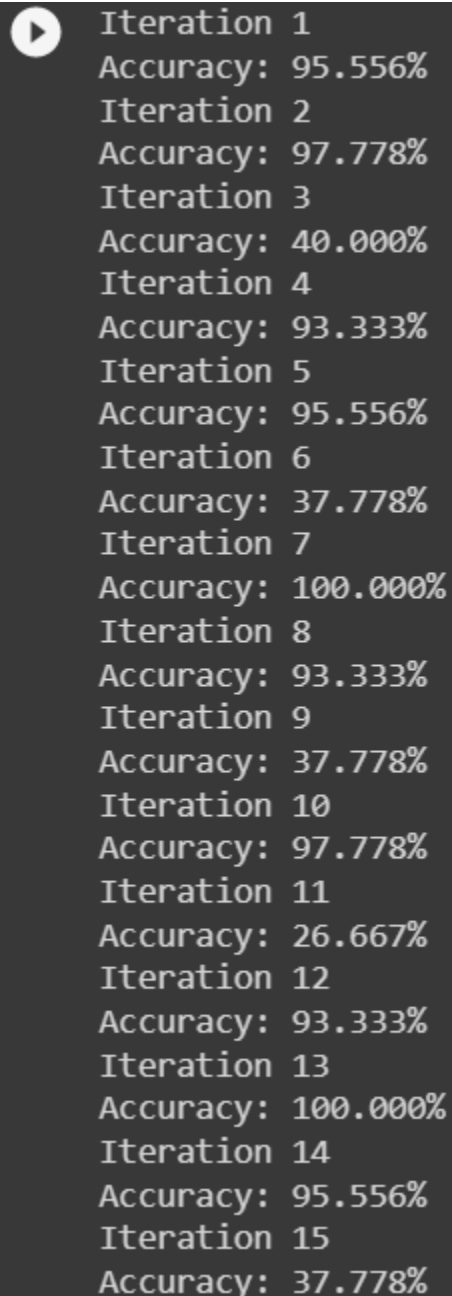
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SUBMITTED TO :- DR. Alokke Datta

Q -> Implement Multilayer Perceptron

For IRIS Dataset:



```
Iteration 1
Accuracy: 95.556%
Iteration 2
Accuracy: 97.778%
Iteration 3
Accuracy: 40.000%
Iteration 4
Accuracy: 93.333%
Iteration 5
Accuracy: 95.556%
Iteration 6
Accuracy: 37.778%
Iteration 7
Accuracy: 100.000%
Iteration 8
Accuracy: 93.333%
Iteration 9
Accuracy: 37.778%
Iteration 10
Accuracy: 97.778%
Iteration 11
Accuracy: 26.667%
Iteration 12
Accuracy: 93.333%
Iteration 13
Accuracy: 100.000%
Iteration 14
Accuracy: 95.556%
Iteration 15
Accuracy: 37.778%
```

```
Iteration 16  
Accuracy: 95.556%  
Iteration 17  
Accuracy: 93.333%  
Iteration 18  
Accuracy: 42.222%  
Iteration 19  
Accuracy: 88.889%  
Iteration 20  
Accuracy: 95.556%
```

Average Classification Accuracy is:

```
The Mean Accuracy is: 77.889%
```

For Ionosphere Dataset:

```
Iteration 1
Accuracy: 88.679%
Iteration 2
Accuracy: 89.623%
Iteration 3
Accuracy: 86.792%
Iteration 4
Accuracy: 80.189%
Iteration 5
Accuracy: 88.679%
Iteration 6
Accuracy: 83.019%
Iteration 7
Accuracy: 83.962%
Iteration 8
Accuracy: 86.792%
Iteration 9
Accuracy: 90.566%
Iteration 10
Accuracy: 88.679%
Iteration 11
Accuracy: 88.679%
Iteration 12
Accuracy: 92.453%
Iteration 13
Accuracy: 88.679%
Iteration 14
Accuracy: 85.849%
```

```
Iteration 15  
Accuracy: 91.509%  
Iteration 16  
Accuracy: 86.792%  
Iteration 17  
Accuracy: 77.358%  
Iteration 18  
Accuracy: 82.075%  
Iteration 19  
Accuracy: 83.019%  
Iteration 20  
Accuracy: 91.509%
```

Average Classification Accuracy is:

```
The Mean Accuracy is: 86.745%
```