


Team ID: Bio1

Member name	Student's ID
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Test case #1	Hidden layers Number = 1	Neurons in each layer = [4]	Learning Rate = 0.9	Epochs Number = 500	Activation Function= Sigmoid	Bias = True
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 MLP

Enter number of hidden layers: 1

Enter number of neurons: 4

separate each number with comma

Enter learning rate: 0.9

Enter Epochs: 500

Select Function: Sigmoid

Check to add bias: ☒ Bias


Run

Train Accuracy: 66.67 Test Accuracy: 33.33

Confusion Matrix:

```
['A|P', 'Adelie', 'Gentoo', 'Chinstrap']
['Adelie', 0, 0, 20]
['Gentoo', 0, 0, 20]
['Chinstrap', 0, 0, 20]
```

Test case #2	Hidden layers Number = 2	Neurons in each layer = [4,3]	Learning Rate = 0.9	Epochs Number = 1000	Activation Function= Sigmoid	Bias = True
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 MLP

Enter number of hidden layers: 2

Enter number of neurons: 4,3

separate each number with comma

Enter learning rate: 0.9

Enter Epochs: 1000

Select Function: Sigmoid

Check to add bias: ☒ Bias

Run

Train Accuracy: 56.67 Test Accuracy: 33.33

Confusion Matrix:

```
['A|P', 'Adelie', 'Gentoo', 'Chinstrap']
['Adelie', 0, 0, 20]
['Gentoo', 0, 0, 20]
['Chinstrap', 0, 0, 20]
```

Test case #3	Hidden layers Number = 2	Neurons in each layer = [3,4]	Learning Rate = 0.9	Epochs Number = 1000	Activation Function= Tanh	Bias = False
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MLP

Enter number of hidden layers: 2

Enter number of neurons: 3,4

separate each number with comma

Enter learning rate: 0.9

Enter Epochs: 1000

Select Function: Tanh

Check to add bias: ☐ Bias

Run

Train Accuracy: 96.67 Test Accuracy: 33.33

Confusion Matrix:

```
[ 'A|P', 'Adelie', 'Gentoo', 'Chinstrap' ]
[ 'Adelie', 0, 0, 20 ]
[ 'Gentoo', 0, 0, 20 ]
[ 'Chinstrap', 0, 0, 20 ]
```

Test case #4	Hidden layers Number = 2	Neurons in each layer = [3,4]	Learning Rate = 0.1	Epochs Number = 1000	Activation Function= Tanh	Bias = False
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MLP

Enter number of hidden layers:

Enter number of neurons:

separate each number with comma

Enter learning rate:

Enter Epochs:

Select Function:

Check to add bias: ☐ Bias

Run

Train Accuracy: Test Accuracy:

Confusion Matrix:

```
[ 'A|P', 'Adelie', 'Gentoo', 'Chinstrap' ]
[ 'Adelie', 0, 0, 20 ]
[ 'Gentoo', 0, 0, 20 ]
[ 'Chinstrap', 0, 0, 20 ]
```

Test case #5	Hidden layers Number = 1	Neurons in each layer = [4]	Learning Rate = 0.1	Epochs Number = 1000	Activation Function= Tanh	Bias = True
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MLP

Enter number of hidden layers: 1

Enter number of neurons: 4

separate each number with comma

Enter learning rate: 0.1

Enter Epochs: 1000

Select Function: Tanh

Check to add bias: ☒ Bias

Run

Train Accuracy: 83.33 Test Accuracy: 33.33

Confusion Matrix:

```
['A|P', 'Adelie', 'Gentoo', 'Chinstrap']  
['Adelie', 0, 0, 20]  
['Gentoo', 0, 0, 20]  
['Chinstrap', 0, 0, 20]
```