1. 編譯結果

```
(base) zhouchou@zhoudeMacBook-Air NNxor % make
cc -g -Wall -Werror -c main.c
cc -pthread -lpthread -o backprop main.o layer.o neuron.o -lm
```

2. 執行結果

```
Enter the number of Layers in Neural Network:
3
Enter number of neurons in layer[1]:
2
Enter number of neurons in layer[2]:
4
Enter number of neurons in layer[3]:
1

Created Layer: 1
Number of Neurons in Layer 1: 2
Neuron 1 in Layer 1 created
Neuron 2 in Layer 1 created

Created Layer: 2
Number of Neurons in Layer 2: 4
Neuron 1 in Layer 2 created
Neuron 2 in Layer 2 created
Neuron 3 in Layer 2 created
Neuron 4 in Layer 2 created

Created Layer: 3
Number of Neurons in Layer 3: 1
Neuron 1 in Layer 3 created
```

```
Initializing weights...
0:w[0][0]: 0.766243
1:w[0][0]: 0.250295
2:w[0][0]: 0.706896
3:w[0][0]: 0.793307
0:w[0][1]: 0.114556
1:w[0][1]: 0.344917
2:w[0][1]: 0.025145
3:w[0][1]: 0.607074
0:w[1][0]: 0.095798
0:w[1][1]: 0.732832
0:w[1][2]: 0.204670
0:w[1][3]: 0.757424

Neural Network Created Successfully...

Enter the learning rate (Usually 0.15):
0.15
```

```
Enter the number of training examples:
4

Enter the Inputs for training example[0]:
0
0

Enter the Inputs for training example[1]:
0
1

Enter the Inputs for training example[2]:
1
0

Enter the Inputs for training example[3]:
1
1

Enter the Desired Outputs (Labels) for training example[0]:
0

Enter the Desired Outputs (Labels) for training example[1]:
1

Enter the Desired Outputs (Labels) for training example[2]:
1

Enter the Desired Outputs (Labels) for training example[3]:
0
```

參考網站資料，使用動態記憶體配置，即時釋放記憶體。

https://medium.com/analytics-vidhya/building-neural-network-framework-in-c-using-backpropagation-8ad589a0752d