

Lab Assignment No. 2

Code:

```
import numpy as np

class McCullochPittsNeuron():
    def __init__(self, threshold, weights):
        self.threshold = threshold
        self.weights = weights
        self.output = []

    def andNot(self, inputs):
        for inputXY in inputs:
            self.weightedSum = self.weights[0]*inputXY[0] +
self.weights[1]*inputXY[1]
            if self.weightedSum >= self.threshold:
                self.output.append(1)
            else:
                self.output.append(0)
        return self.output

mcpn = McCullochPittsNeuron(1, [1, -1])
output = mcpn.andNot([(0,0), (0,1), (1, 0), (1, 1)])
print("Output of McCulloch Pitts Neuron",output)
```

Output:

Output of McCulloch Pitts Neuron [0, 0, 1, 0]