**Assignment No. 2**

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# Title- AND NOT function using Mc Culloch-Pitts Neural Net.

# Program:

import numpy as np

def linear\_threshold\_gate(dot, T):

'''Returns the binary threshold output''' if dot >= T:

return 1 else:

return 0

input\_table = np.array([

[0,0],

[0,1],

[1,0],

[1,1]

])

print(f'input table:\n{input\_table}')

weights = np.array([1,-1]) dot\_products = input\_table @ weights

T = 1

for i in range(0,4):

activation = linear\_threshold\_gate(dot\_products[i], T)

print(f'Activation: {activation}')

**Output:**

input table: [[0 0]

[0 1]

[1 0]

[1 1]]

Activation: 0

Activation: 0

Activation: 1

Activation: 0