**AIM: Write a program in Python to implement NAND function using MP neuron.**

**CODE:**

w1 = int(input("enter the weight 1: "))

w2 = int(input("enter the weight 2: "))

theta = int(input("enter the theta:"))

inputarray = [[0,0],[0,1],[1,0],[1,1]]

expected = [1,1,1,0]

actual = []

for i in range(0,4):

temp = inputarray[i][0]\*w1+inputarray[i][1]\*w2

if(temp >= theta):

actual.append(1)

else:

actual.append(0)

for i in range(0,4):

if(expected[i] == actual[i]):

found = 1

else:

found = 0

break

print("Input array")

print(inputarray)

print("Actual output")

print(actual)

print("Expected output")

print(expected)

if(found ==1):

print("assumed weights and theta are correct")

else:

print("assumed weights and theta are incorrect")

**Output:**

