# **AIM:** Design a simple linear neural network model.

w = float(input("Enter the value for weight: "))

b = float(input("Enter the value for bias: "))

x = float(input("Enter the value for input: "))

# The net input is calculated with the formula yin = b + wx

print("The net input (yin): ")

yin = float(b + (w \* x))

print(yin)

**Output:**

Enter the value for weight: 1

Enter the value for bias: 1

Enter the value for input: 2

The net input (yin):

3.0

# **AIM:** Calculate the o/p of neural network of both Binary and Bipolar

n=int(input("Enter the number of input neurons: "))

w=[]

x=[]

for i in range(0,n):

    a=float(input("Enter the input: "))

    x.append(a)

    b=float(input("Enter the weight: "))

    w.append(b)

print("The weight given are: ",w)

print("The given inputs are: ",x)

y=0.0

for i in range(0,n):

    y=y+(w[i]\*x[i])

print("The net input is: ",round(y,3))

**Output:**

Enter the number of input neurons: 2

Enter the input: 1

Enter the weight: 1

Enter the input: 2

Enter the weight: 1

The weight given are: [1.0, 1.0]

The given inputs are: [1.0, 2.0]

The net input is: 3.0