**Calculate the output of the above neural network. Consider the following input values**:

x1 = (2193937/8964879)\*23=5.628693

x2 = (2193937/8964879) \*32=7.831225

x3 = (2193937/8964879)\*56 =13.70464

x4 = (2193937/8964879)\*48=11.74684

|  |
| --- |
|  |

h1=(x1\*w1)+(x2\*w3)+(x3\*w5)+(x4\*w7)

h1 =(5.628693\*0.2)+(7.831225\*0.2)+(13.70464\*0.2)+(11.74684\*0.2)

h1= (1.125738585+1.566244988+2.740928729+2.349367482)

**h1= 7.78228**

**Note**

Relu function is return 0 if the input is negative else return the

input as it is.

h2 = (x1 \* w2) + (x2 \* w4) + + (x3 \* w6) (x4 \* w8)

h1 =(5.628693\*0.2)+(7.831225\*0.2)+(13.70464\*0.2)+(11.74684\*0.2)

h1= (1.125738585+1.566244988+2.740928729+2.349367482)

**h2= 7.78228**

h3 = (h1 \* w9) + (h2 \* w11)

=(7.78228\*0.1)+ (7.78228\*0.1)

**h3=1.556456**

**h4 = (h1 \* w10) + (h2 \* w12)**

=(7.78228\*0.1)+ (7.78228\*0.1)

**h4=1.556456**

O1 = (1 \* 0.5) + (h3 \* w13) + (h4 \* w15)

=0.5+(1.556456\*0.3)+ (1.556456\*0.3)

**O1=1.433874**

O2 = 1 + (h3 \* w14) + (h4 \* w16)

O2=1+(1.556456\*0.3)+ (1.556456\*0.3)

**O2=1.933874**

**Sigmoid Function=1/1**