

**Example#4 : The input to the single input neuron is 3 and its weight 2.4 and bias-2 show net value!**

```
x=3;
w=2.4;
b=-2;
S = b+sum(x*w);
% Net value in threshold function
threshold=0;
if S>= threshold
    output=1;
else S< threshold
    output=0;
end
disp(['output of Threshold:',num2str(output)]);
```

output of Threshold:1

```
% Net value in Sigmoid Function
c=1;
Output= 1./(1+ exp( - c*S));
disp(['output of sigmoid:' , num2str(output)]);
```

output of sigmoid:1

```
% Net value in Hyperbolic Function
c=1;
output= (exp(c*S)- exp(-c*S))./(exp(c*S)+ exp(-c*S));
disp(['output of Hyperbolic:' , num2str(output)]);
```

output of Hyperbolic:0.99994