In [ ]:
```
# OR using MP neuron
```

In [1]:
```
import numpy as np
x=np.array([[1,1],[1,0],[0,1],[0,0]])
t=np.array([[1],[1],[1],[0]])
w=np.array([[0],[0]])
theta=1
yin=np.zeros(shape=(4,1))
y=np.zeros(shape=(4,1))
yin=np.dot(x,w)
i=0
found=0
while(found==0):
  i=0
  yin=np.dot(x,w)
        #print(yin)
  while(i<4):
    if yin[i]>=theta:
      y[i]=1
      i=i+1
    else:
      y[i]=0
      i=i+1
    #print("y",y)
    #print("t",t)
  if (y==t).all():
    print("MODEL IS TRAINED ")
    print("\nOutput : \n",y)
    print("\nweights : ",w,"\n")
    print("theta : ",theta)
    found=1
  else:
    print("MODEL IS NOT TRAINED")
    w=np.zeros(shape=(0,0))
    theta=int(input("Enter New Theta : "))
    for k in range(int(2)):
      w1=int(input("Enter Weight : "))
      w=np.append(w,w1)
```

```
MODEL IS NOT TRAINED
Enter New Theta : 1
Enter Weight : 1
Enter Weight : 1
MODEL IS TRAINED

Output :
 [[1.]
 [1.]
 [1.]
 [0.]]

weights :  [1. 1.]

theta :  1
```

In [ ]: