```
In [2]: import numpy as np
In [3]: #execute OR gate using Hebbian Learning
        #Model hebbian learning rule using python
        from random import choice
        activation = lambda x: 0 if x<0 else 1
        data = [
             (np.array([1,1]),1),
             (np.array([1,0]),0),
             (np.array([0,1]),0),
             (np.array([0,0]),0)
        x,y = choice(data)
        print(x,y)
        w = np.array([1,0.5])
        val = np.dot(x,w)
        pred = activation(val)
        pred
        error = y - pred
         error
        [1 1] 1
Out[3]: 0
In [ ]:
```