```python
# Practical : 2
import numpy as np

def mcCulloch_pitts_AND(x1, x2):
    weights = np.array([1, 1])  # Weights for AND function
    threshold = 2  # Activation threshold
    weighted_sum = x1 * weights[0] + x2 * weights[1]
    output = 1 if weighted_sum >= threshold else 0
    return output

def mcCulloch_pitts_OR(x1, x2):
    weights = np.array([1, 1])  # Weights for OR function
    threshold = 1  # Activation threshold
    weighted_sum = x1 * weights[0] + x2 * weights[1]
    output = 1 if weighted_sum >= threshold else 0
    return output

def mcCulloch_pitts_ANDNOT(x1, x2):
    weights = np.array([1, -1])  # Weights for ANDNOT function
    threshold = 1  # Activation threshold
    weighted_sum = x1 * weights[0] + x2 * weights[1]
    output = 1 if weighted_sum >= threshold else 0
    return output


print("x1 x2 | AND(x1, x2) | OR(x1, x2) | ANDNOT(x1, x2)")
print("-----------------------------------------------")
for x1 in [0, 1]:
    for x2 in [0, 1]:
        print(f"{x1}  {x2}  |     {mcCulloch_pitts_AND(x1, x2)}     |
{mcCulloch_pitts_OR(x1, x2)}    |      {mcCulloch_pitts_ANDNOT(x1,
x2)}")
```

```
x1 x2 | AND(x1, x2) | OR(x1, x2) | ANDNOT(x1, x2)
-----------------------------------------------
0  0  |     0     |     0    |      0
0  1  |     0     |     1    |      0
1  0  |     0     |     1    |      1
1  1  |     1     |     1    |      0
```