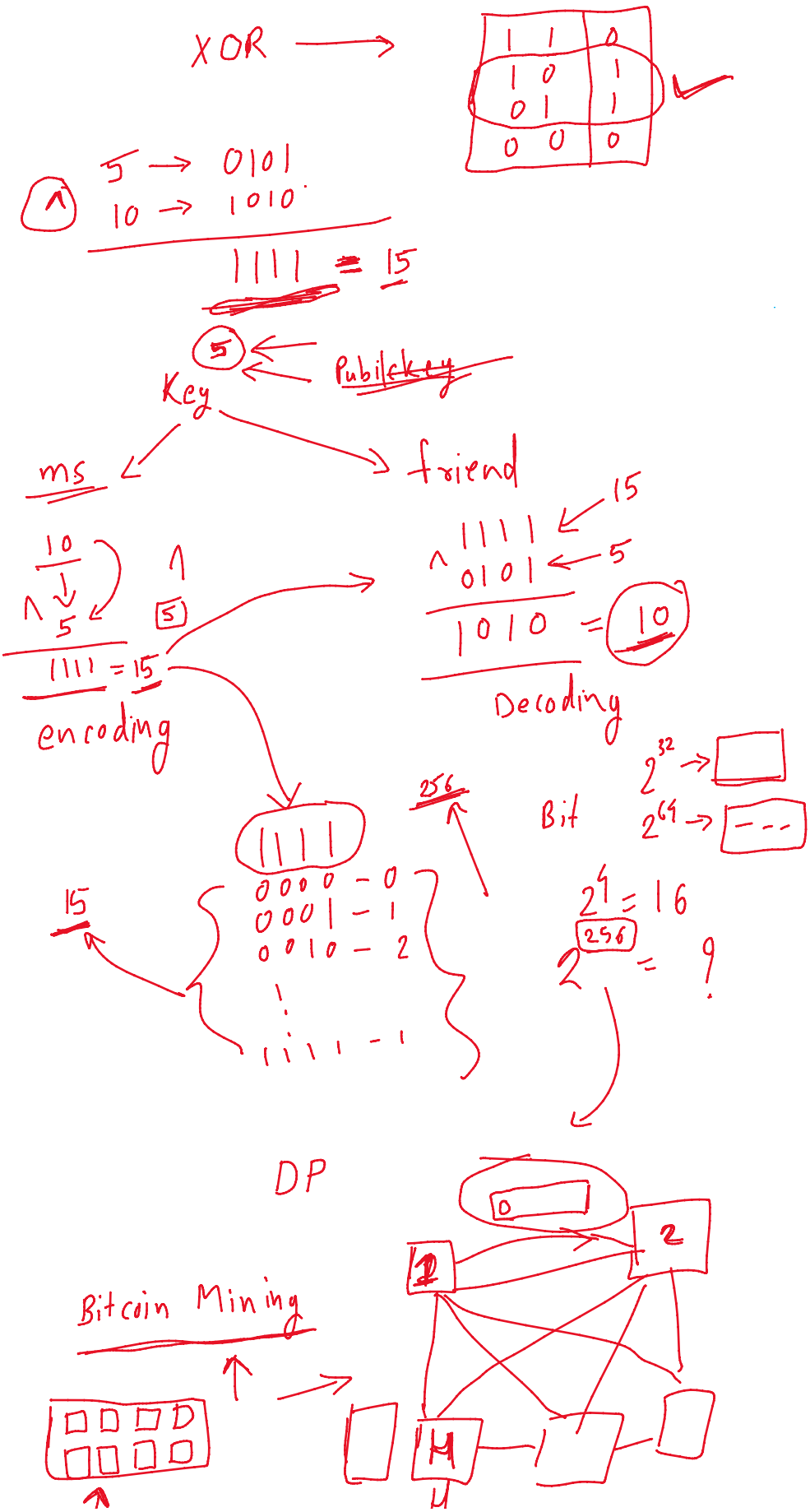
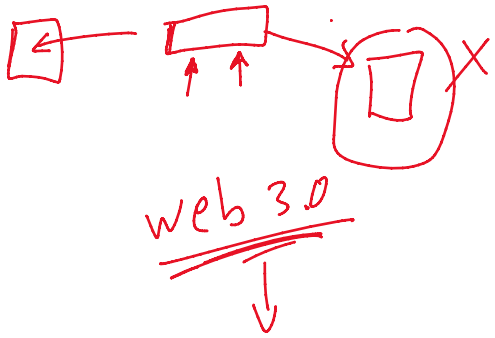
Day 7 - Bitwise XOR

29 June 2022 08:58



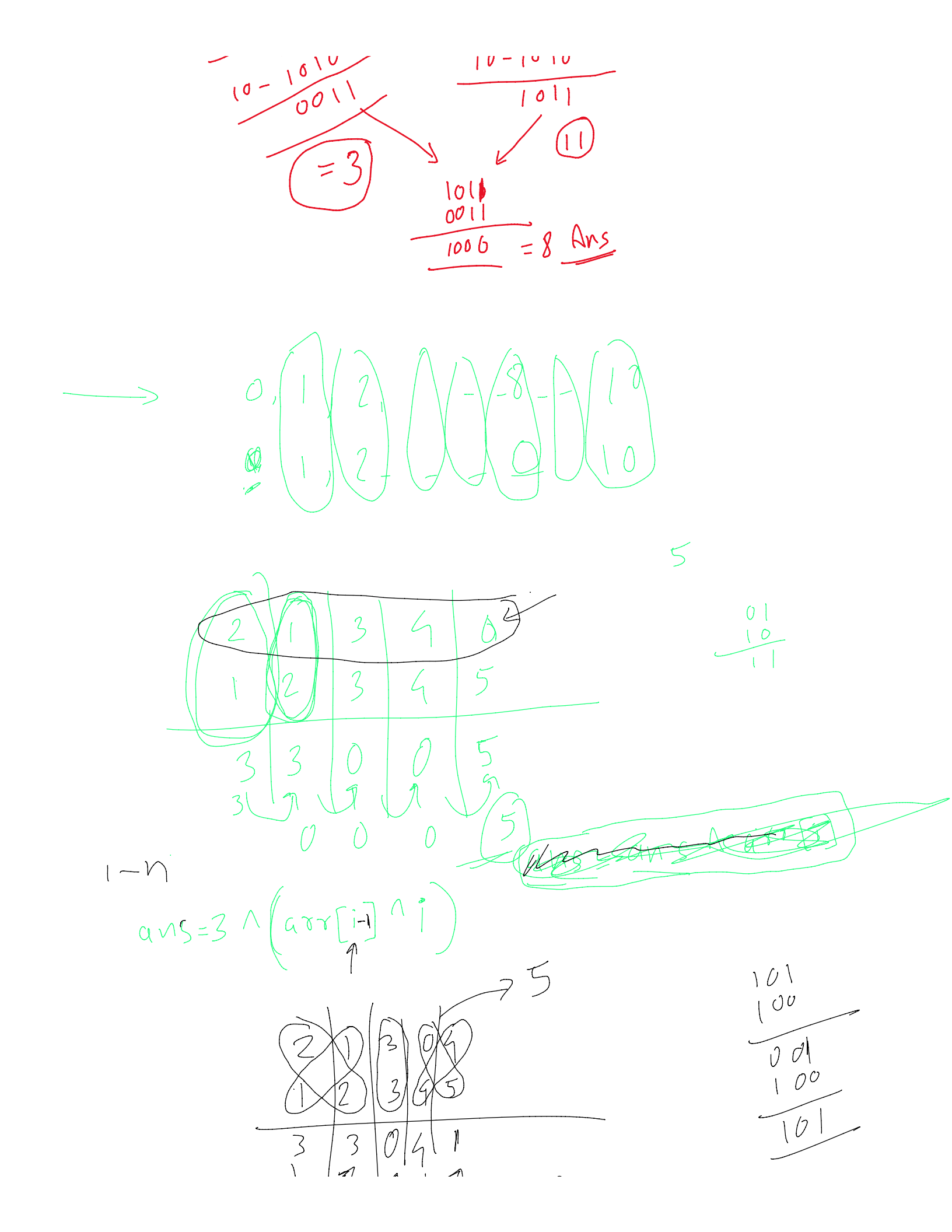


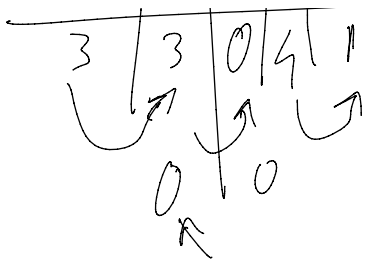
XOR

1, 2, 3, 4, 5, 6, 7, 0, 9, 10

1 - 0001
2 - 0010
0011
3 - 0011
0000
4 - 0100
0100
5 - 0101
0001
6 - 0110
0111
7 - 0111
0000
0 - 0000
0000
9 - 1001
1001
10 - 1010
0011

0000
8 - 1000
1000
9 - 1001
0001
10 - 1010
1011

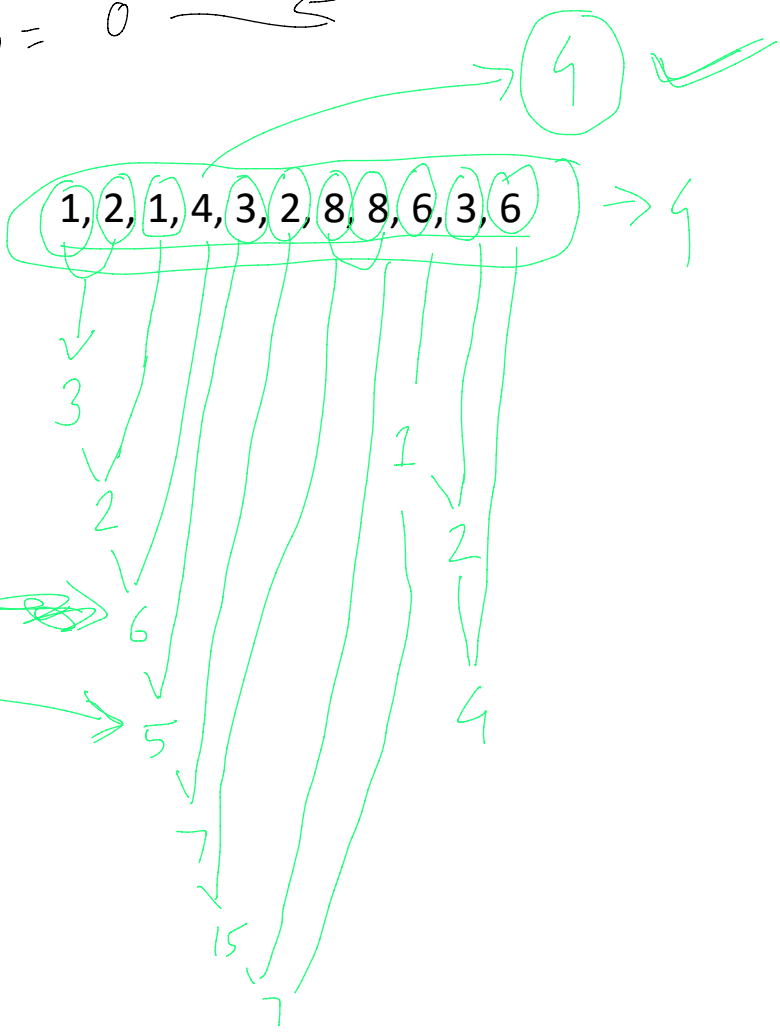

10-1010
0011
=3
10-1010
1011
11
1011
0011
1006 =8 Ans
0 1 2 8 10
1 2 0 10
5
2 1 3 4 0
1 2 3 4 5
3 3 0 0 5
3 0 0 0 5
01
10
11
1-n
ans=3^(arr[i-1]^i)
5
2 1 3 0 4
1 2 3 4 5
3 3 0 4 1
101
100
001
100
101



101

1 1 1
1 1 0
0 0 1

5 ∧ 5 = 0



2 4 6 8

0

100
010
110
011
101
010
111
1000
114
1060
0111
0110
001
011
010
110
100

a, b
3 , 2

3 ^ 2 = 1

8

x = a ^ b
y = a + b

INPUT :- x = 1 , 8 ✓ 0
y = 5 , 0 ✓ 8

if (x != 0, y != 0)

a + b = 0 ✗

1000
^ 0001
0000

0001 >>
^ 0101
0100 >> 1

001
100
100 = 4

a = x ^ y >> 1

8 ^ 0 >> 1

100 >> 1 = 010
= 2

= 4

y - 4

5 - 2
= 3

0

-4, 4

-4 ✓
4

x ^ y
↓
8 →

100 → -1

111
^ 011

3 → 0 0 1 1 ↑
2 → 0 0 1 0 ↑
4 → 0 1 0 0 ↑

3 - 0011
2 - 0010
4 - 0100

4 → 0100

6 → 0110

0000 0000 0111

4 - 0100

8 - 1000

1111

15