

Gray code

↳ unit distance Code

↳ Reflexive

↳ Cyclic

↳ non-weighted Code

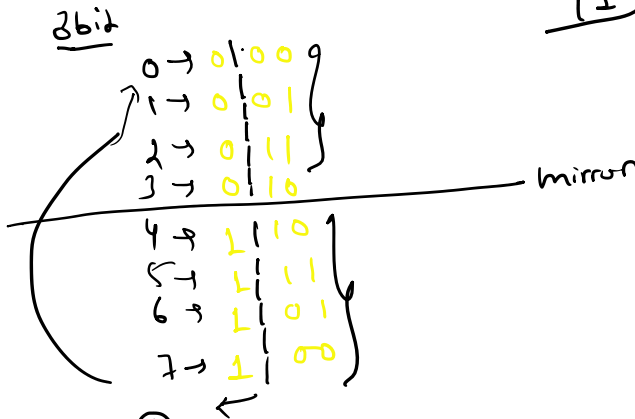
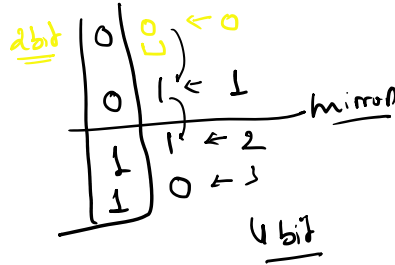
Gray Code

① Unit distance Code

0 → 0000
1 → 0001
2 → 0011
3 → 0010

② Reflexive

0 + 0 → 0
1 + 1 → 0



0	0	0	0
1	0	0	1
2	0	0	1
3	0	0	1
4	0	1	1
5	0	1	1
6	0	1	0
7	0	1	0
8	1	1	0
9	1	1	0
10	1	1	1
11	1	1	1
12	1	0	1
13	1	0	1
14	1	0	0
15	1	0	0

Mirror

Binary 15 →

Gray 15 →

b ₄	b ₃	b ₂	b ₁
1	1	1	1
↓	↓		
1	0	0	0
G ₄	G ₃	G ₂	G ₁

11 → 1011
↓ ↓ ↓ ↓
1110

XOR

input Same → output 0
different input → output 1

0 1 → 1
0 0 → 0
1 1 → 0
1 0 → 1

Gray to binary

Gray 8 → 1 1 0 0
Binary 8 → 1 0 0 0

Gray → 0 1 0 0
Binary → 1 0 1 1