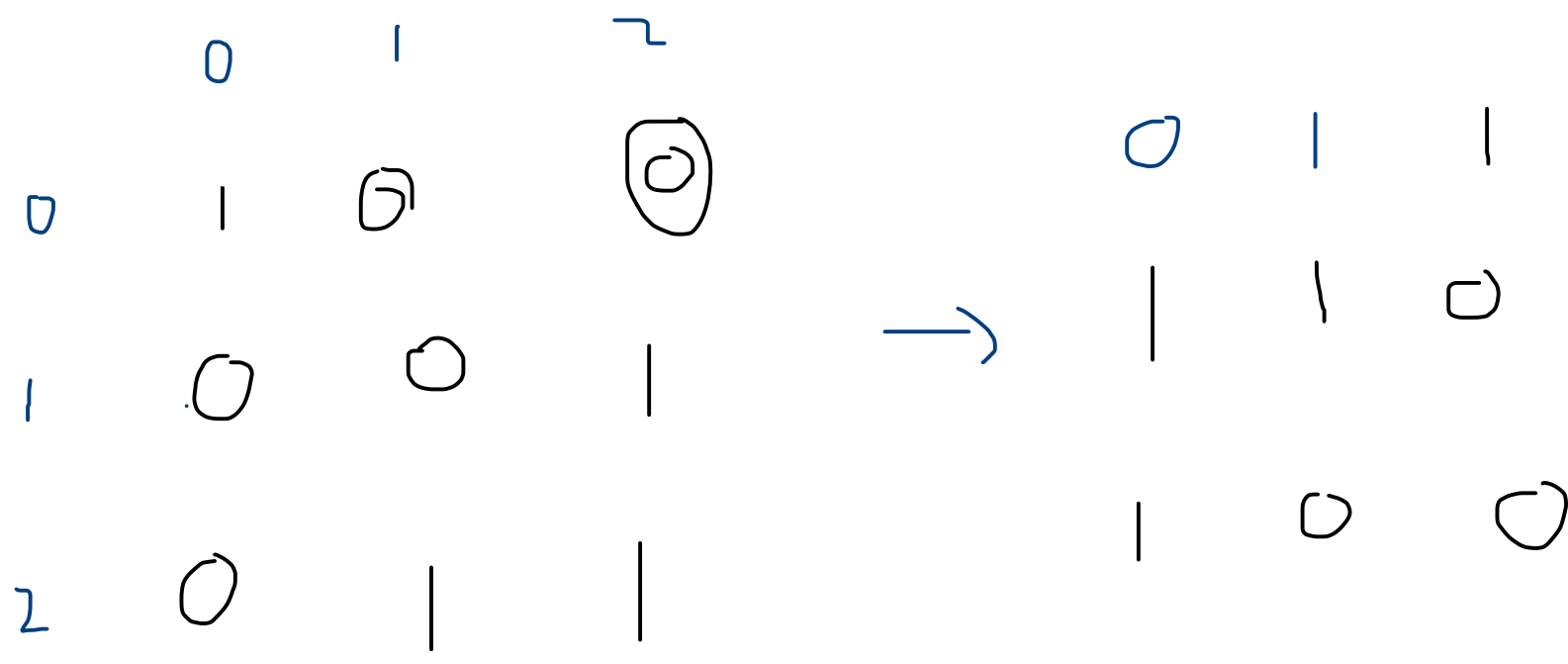
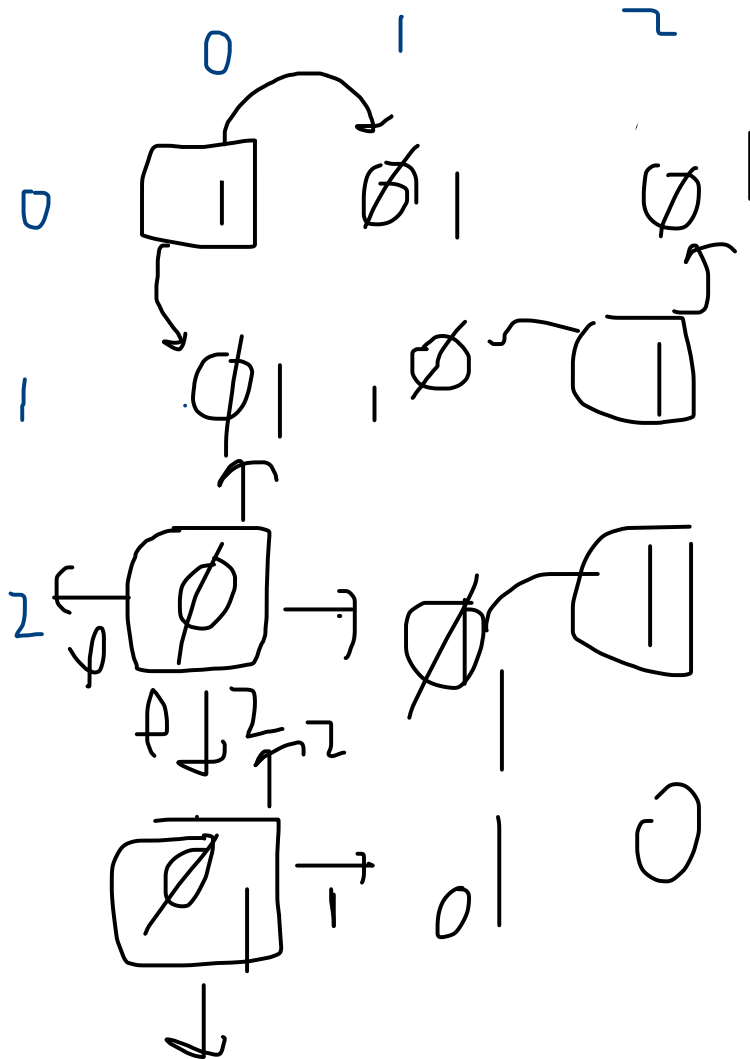


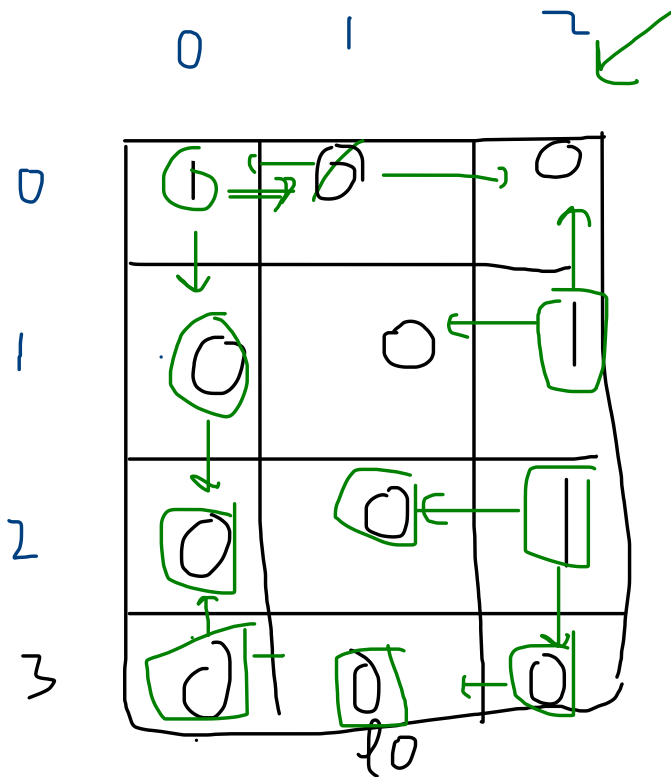
01 Matrix





que \rightarrow $q, c, dist$

ans \rightarrow dist from nearest 1

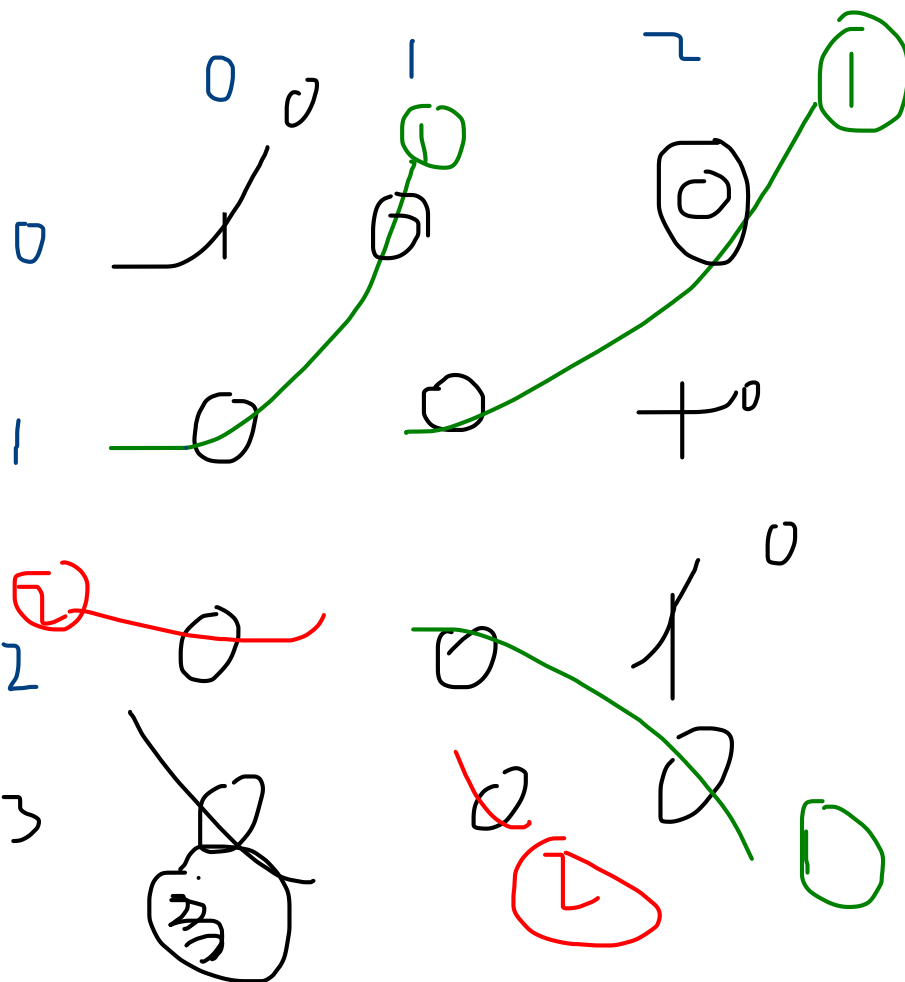


	0	1	2
0	0	$\overline{0+1}=1$	$\overline{0+1}=1$
1	$\overline{0+1}=1$	$\overline{0+1}=1$	0
2	$\overline{1+1}=2$	$\overline{0+1}=1$	0
3	$\overline{2+1}=3$	$\overline{1+1}=2$	$\overline{0+1}=1$

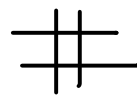
Ans 2

$(0,0,0) (1,2,0) (2,2,0) | (0,1,1) (1,0,1) (0,2,1) (1,1,1)$
 $(3,2,1) (2,1,1)$

Ans 3 $(2,0,2) (3,1,2) | (1,0,3)$



Surrounded Regions



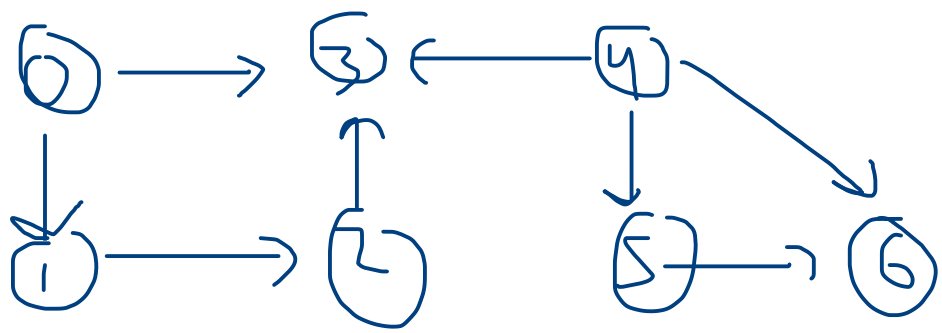
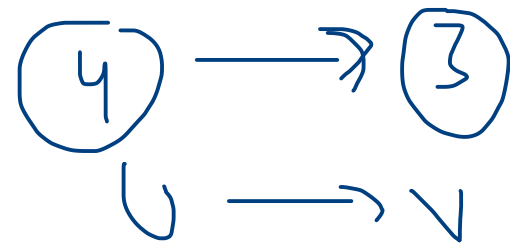
code HW

	0	1	2	3
0	X	X	O	O
1	X	X	O	X
2	X	O	O	X
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X

$(0/2)$ $(0/3)$ l_0
 $(0/3)$ $(1/2)$ l_1
 $(2/2)$ l_2
 $(2/1)$ l_3

Topological Sort (DFS)

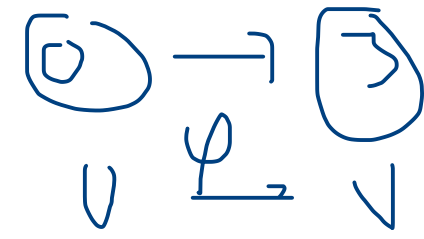
DAG --> Directed Acyclic Graph

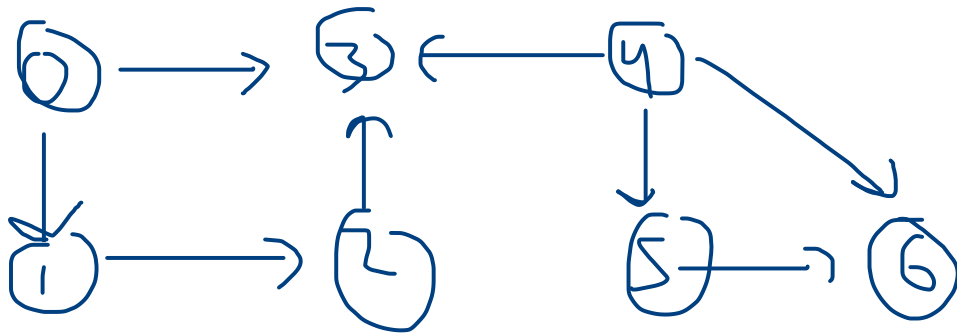


Order

permutation of Vertices

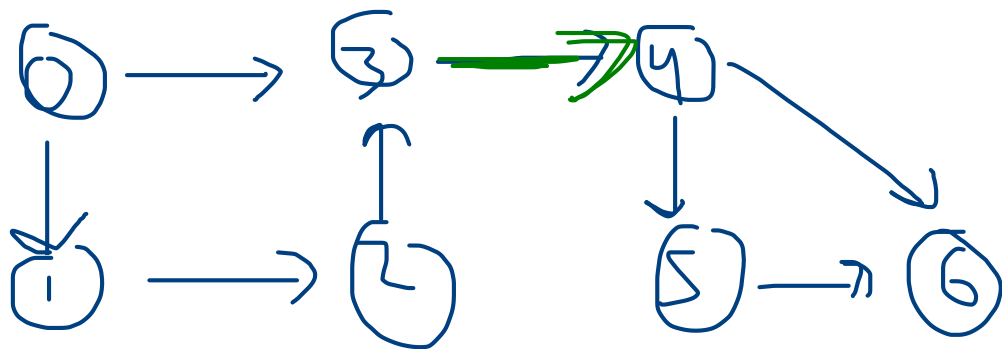
such that for every edge between vertex $U \rightarrow V$, vertex U come before vertex V





D A G

✓	✓
4	0
5	1
6	2
0	4
1	5
2	6
3	3



0 ✓
1
2
3
4
5
6

~~4~~
4
5
6
0
1
2
3

4
0
1
2
4
5
6
3