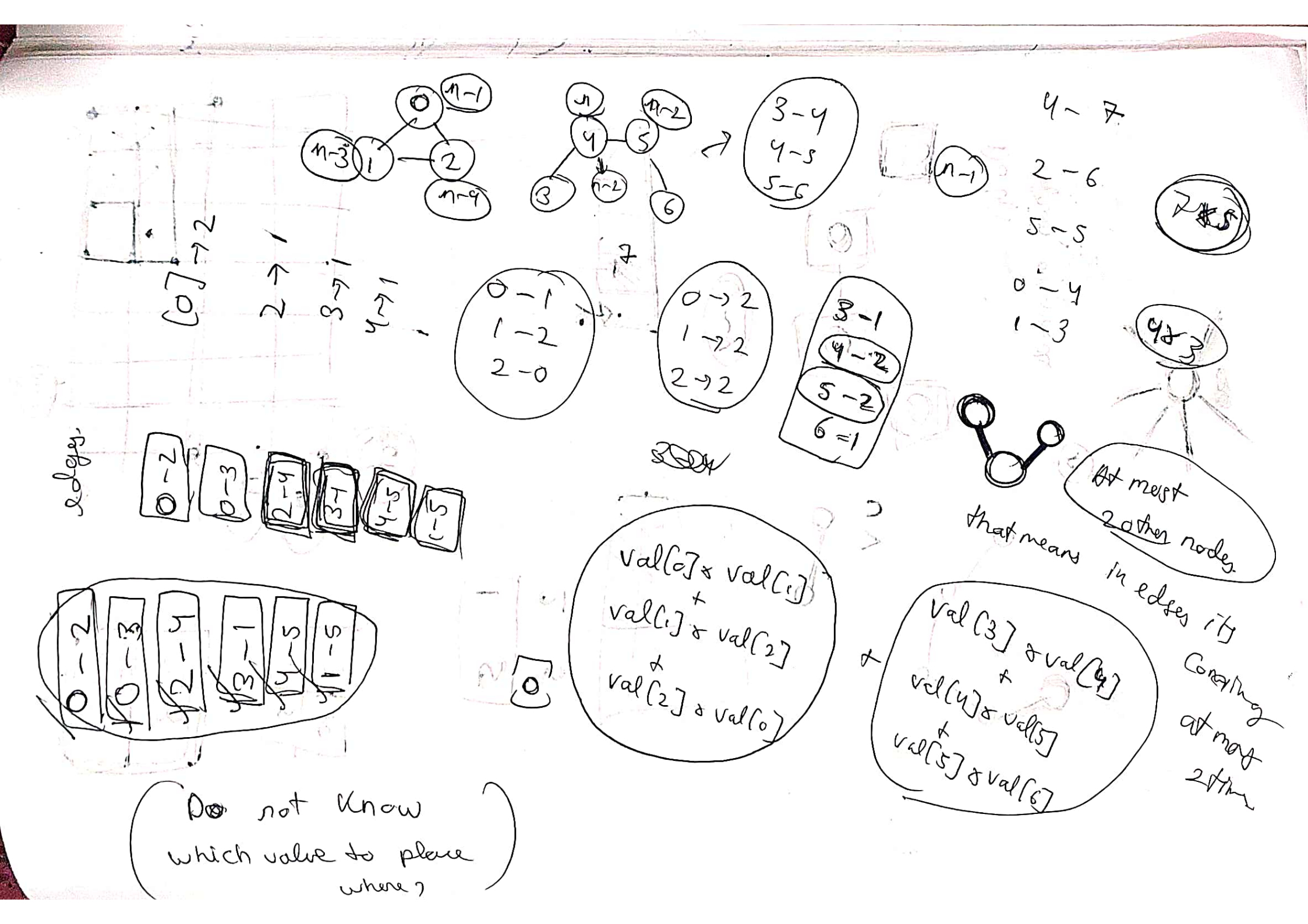
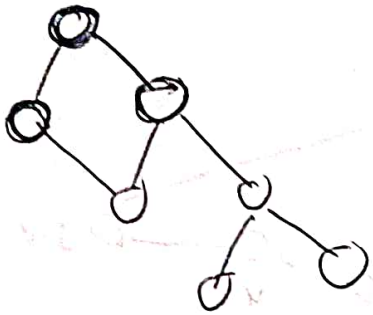
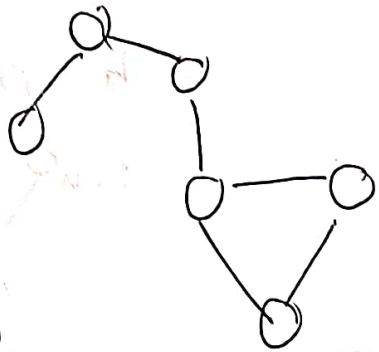
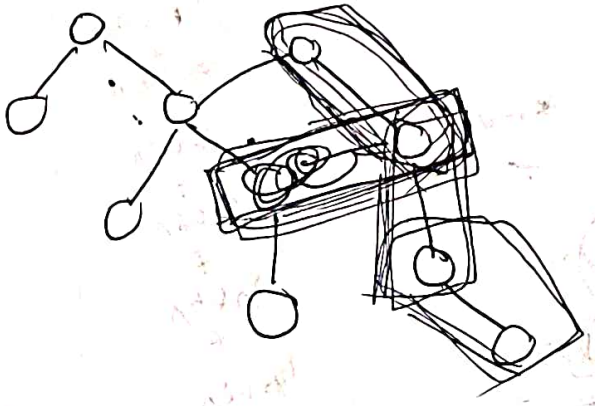
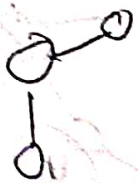

n-1
n-3
n-4
n-2
3-4
4-5
5-6
4-7
2-6
5-5
0-4
1-3
0-1
1-2
2-0
0→2
1→2
2→2
3-1
4-2
5-2
6-1
edges
0-2
0-3
2-4
3-4
4-5
5-1
0-2
0-3
2-5
3-1
4-5
5-5
val[0]*val[1] + val[1]*val[2] + val[2]*val[0]
val[3]*val[4] + val[4]*val[5] + val[5]*val[6]
that means in edges it Covering at most 2 times
at most 2 other nodes
Do not know which value to place where?

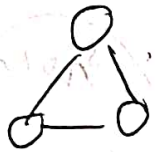






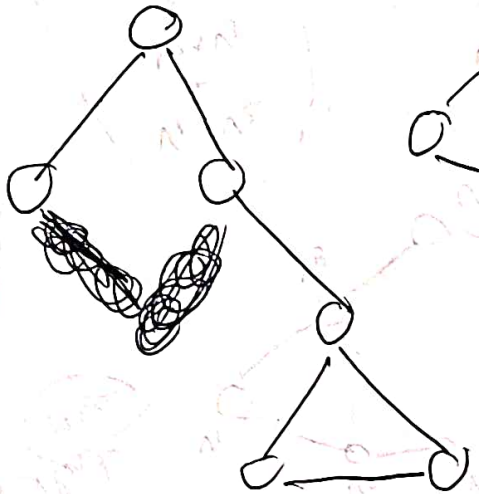
if atmost 2 connects.

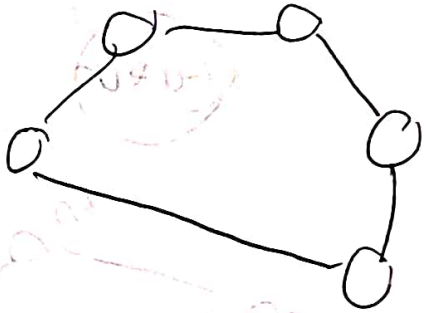




edges i $u_i - v_i$

in normal bfs we will generate frequency.

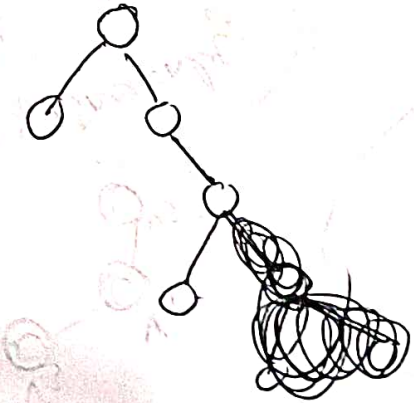


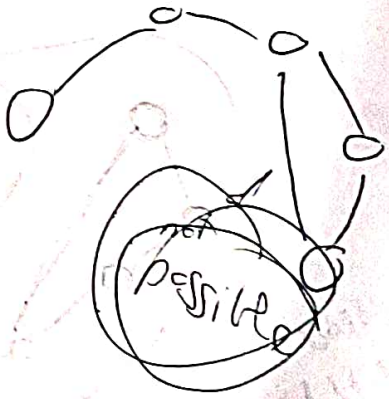


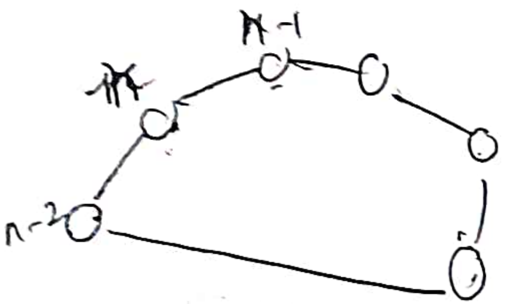
Full con

$f[u_i] \leq 2$

$f[v_i] \leq 2$



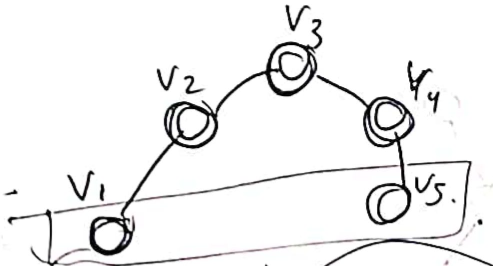




that means either full circle

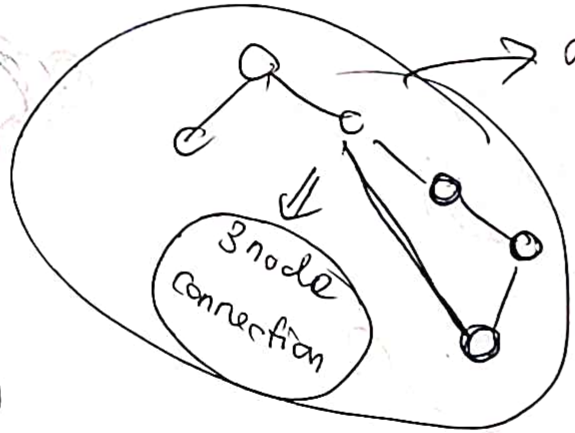
⇓ cycle will gain preference

OR

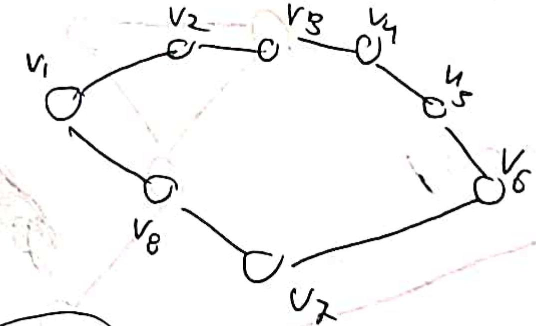


no circle at all

→ Once only ⇓ smallest tree



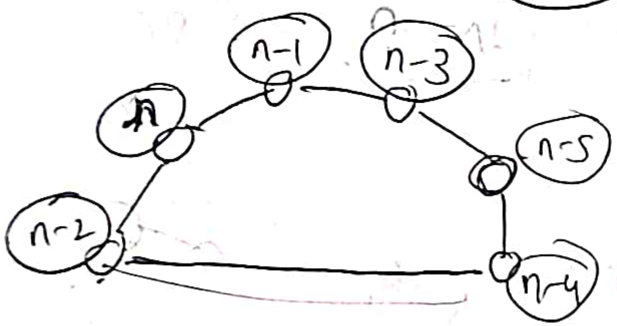
→ this is not possible as

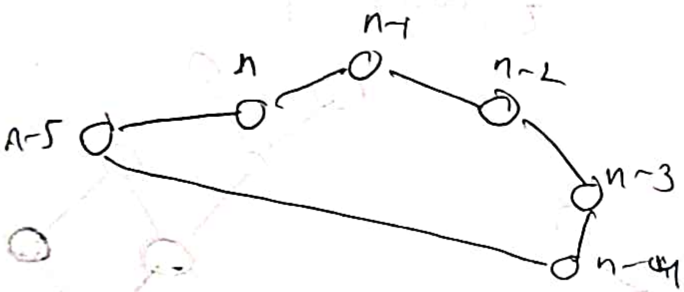


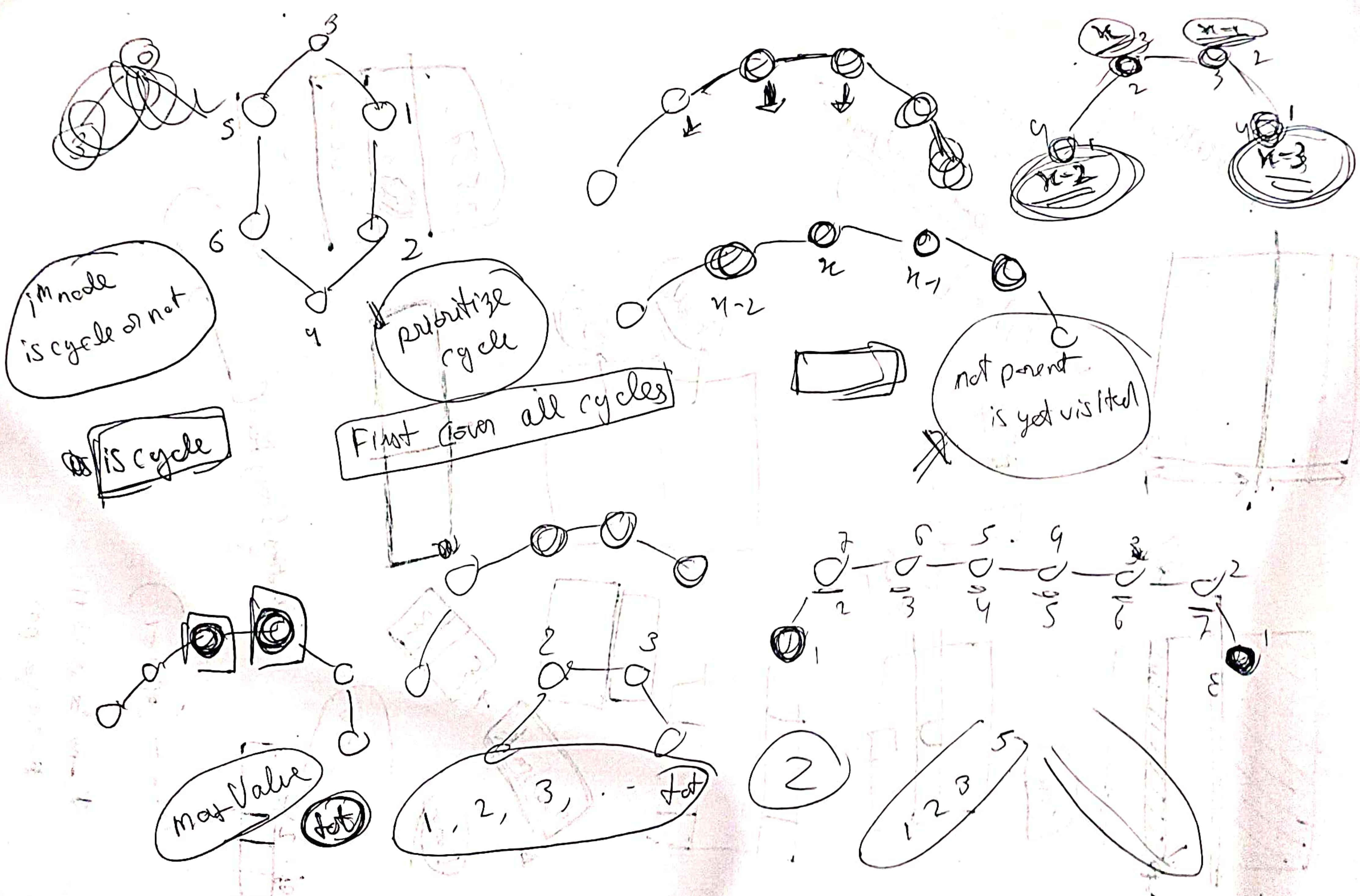
V1 & V2 & V2 & V3 & V3 & V4 & V4 & V5

V1 & V2 & V2 & V3 & V3 & V4 & V4 & V5 & V5 & V6 & V6 & V7 & V7 & V8 & V8 & V1

n & n-1 & n-1 & n-2 & n-1 ...







ith node is cycle or not
is cycle
prioritize cycle
First cover all cycles
not parent is yet visited
max Value
tot
1, 2, 3, . . tot
2
1 2 3 5