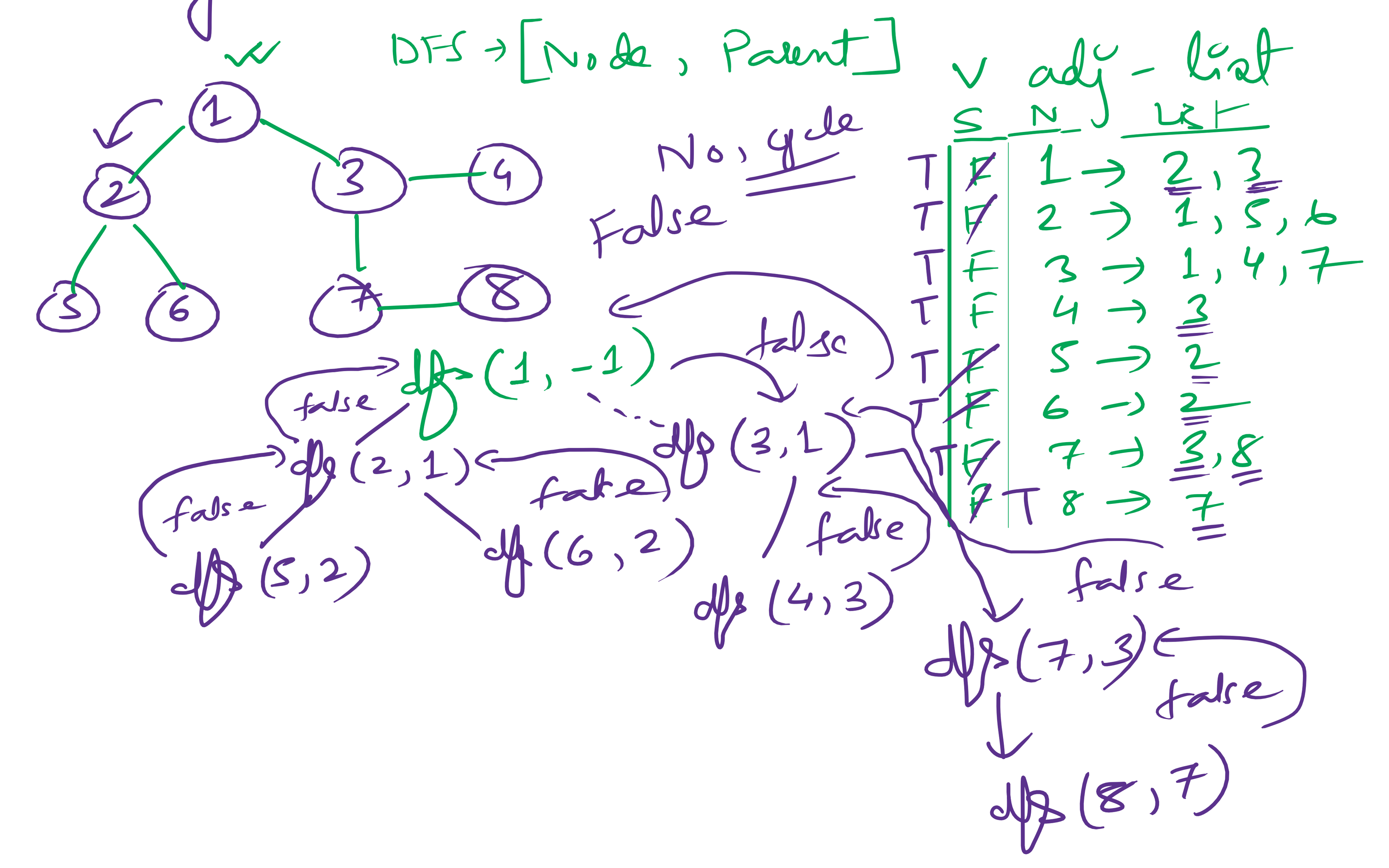
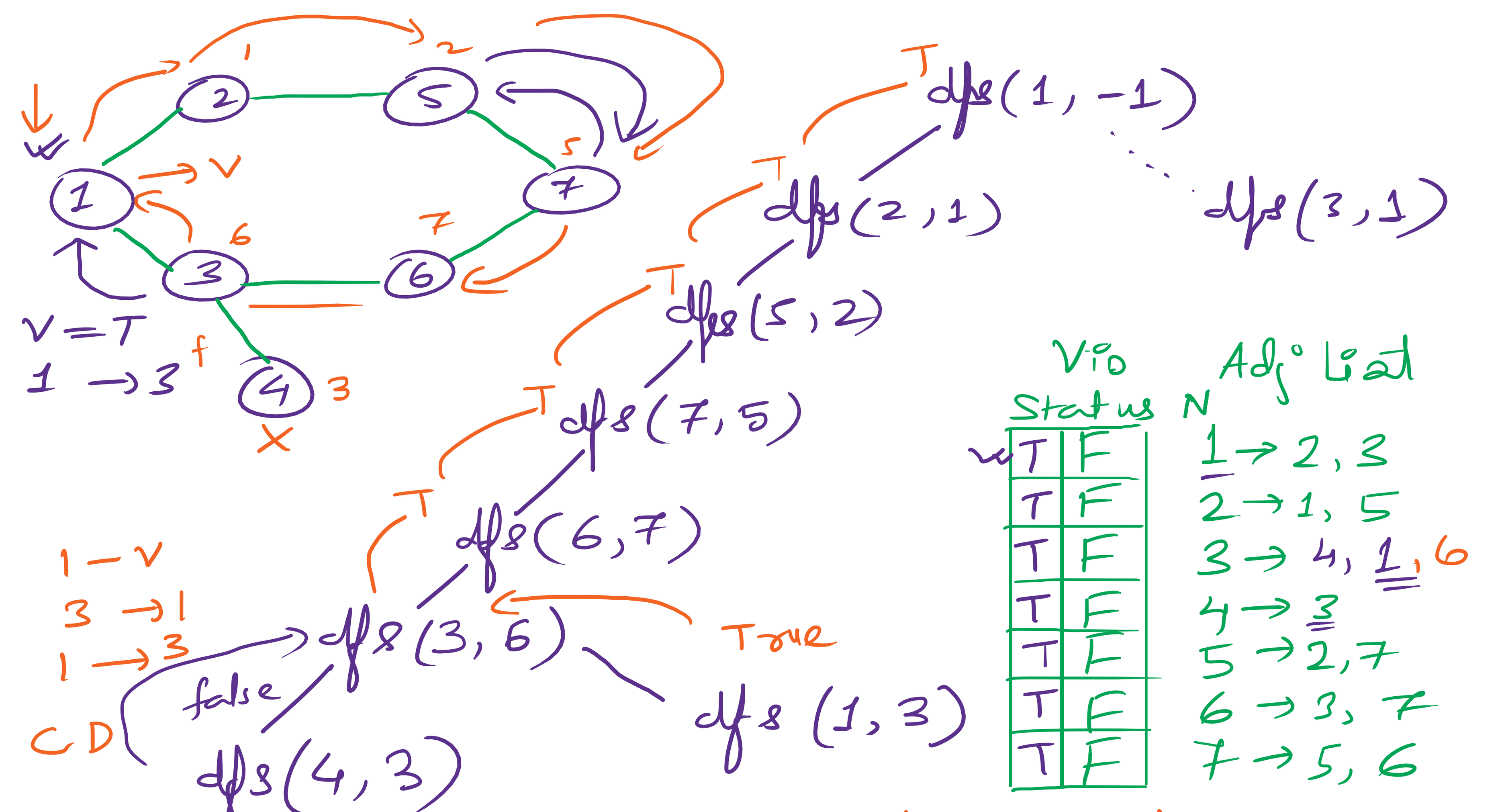
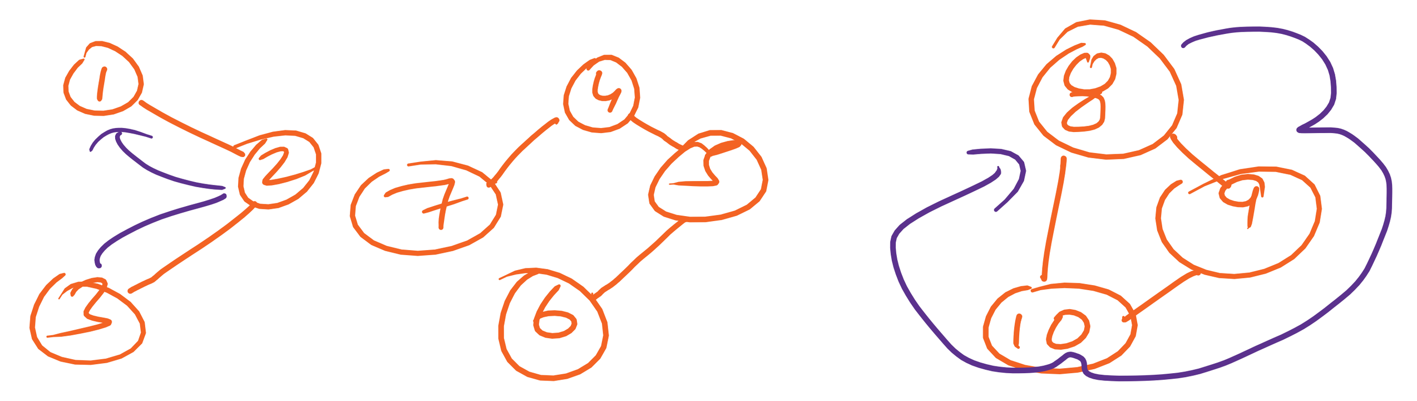
Cycle Detection DFS → Undirected





v = T not a parent
cycle detected.



dfs(1)

3 → 2
(1 to 10)
dfs(8) = true

Given a adjacency matrix, convert it into a adjacency list :→

5x5
0 based

	0	1	2	3	4
0	0	1	1	0	0
1	1	0	1	1	0
2	1	1	0	0	1
3	0	1	0	0	1
4	0	0	1	1	0

0 → 1, 2
1 → 0, 2, 3
2 → 0, 1, 4
3 → 1, 4
4 → 2, 3

Kadane Algo :→

5, -8, 1, 2, -1, 4 = (6)
0 1 2 3 4 5

cm = a[0] = 5, -3, 1 (6)
gm = a[0] = 5

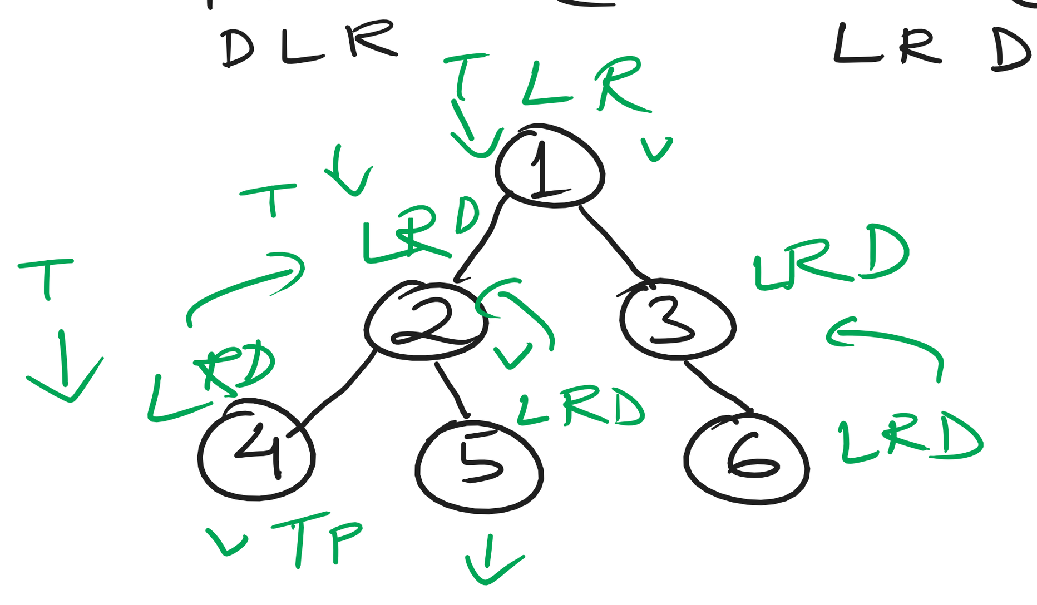
cm = max (arr[i] , cm + arr[i])
m (,)
m (,)
1 -3 = cm

gm = m (cm , gm)
6 , 5

s t e
s t e s
ln t

int $2^{31} - 1$ (6) out of range
long long

DFS → Pre & Post Order
DLR LRD



Pre → 1, 2, 4, 5, 3, 6
Post → 4, 5, 2, 6, 3, 1
In order → ? Binary Tree

L — R
un cycle detect
or Bipartite graph
Graph

TSort
Graph :