Dynamic Programming

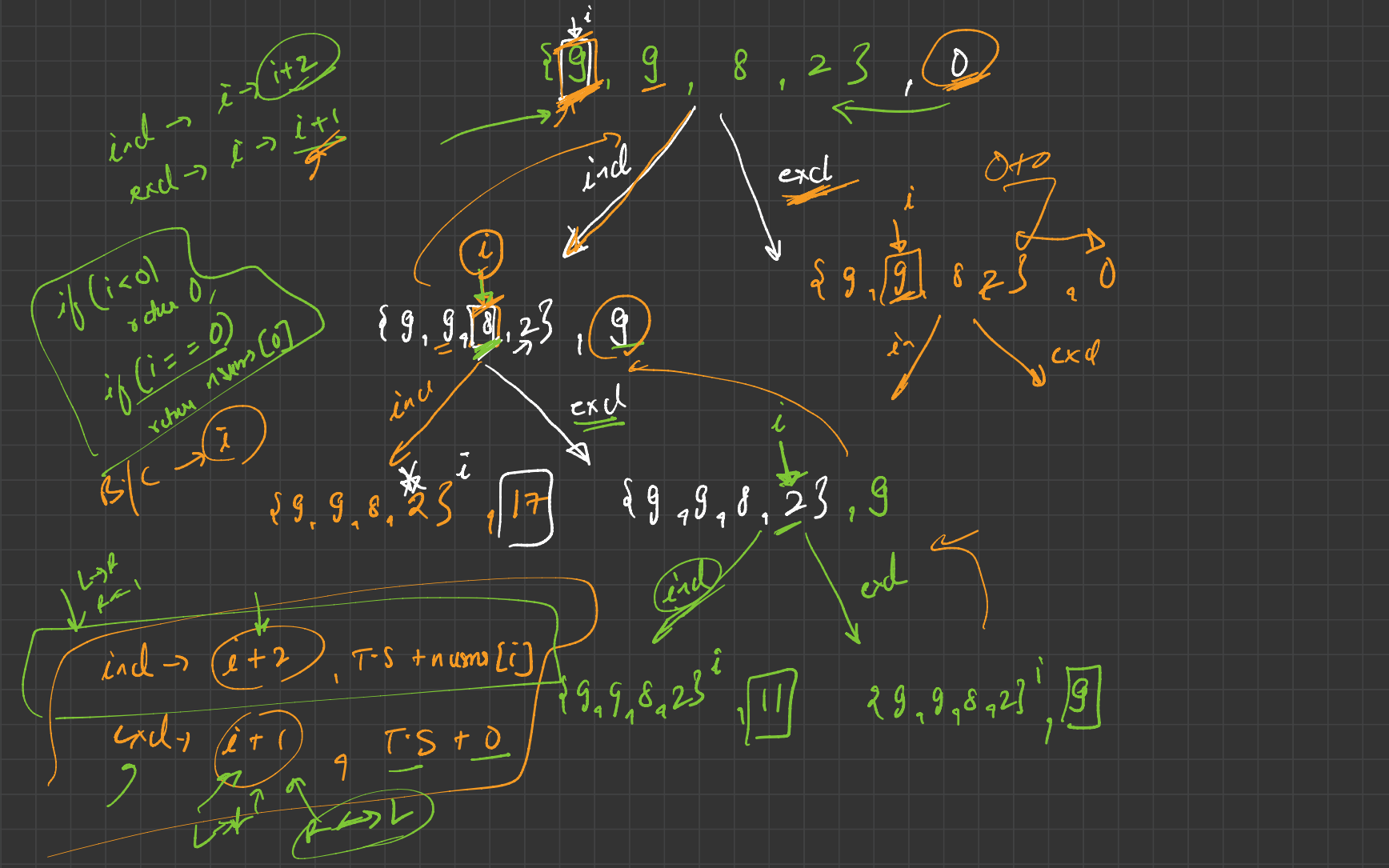
i/p → {9, 9, 8, 2}

9 + 8 → 17 →

9 + 2 → 11

8 + 9 → 17

2 + 9 → 11


incl
excl
i
i+2
i+1
if (i<0) return 0;
if (i==0) return nums[0];
return i;
T·S + nums[i]
T·S + 0
17
11
9

→ Recursion + Memoisation → T.C → O(N)

S.C → O(N) + O(N)

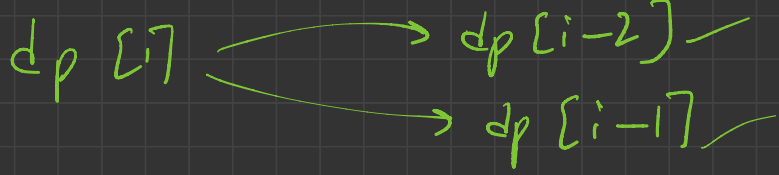
→ Tabulation: → T.C → O(N)

S.C → O(N)

→ Space Optimisation → O(1)

dp[i] → ind → dp[i-2]

→ cxd → dp[i-1]


dp [i]
dp [i-2]
dp [i-1]