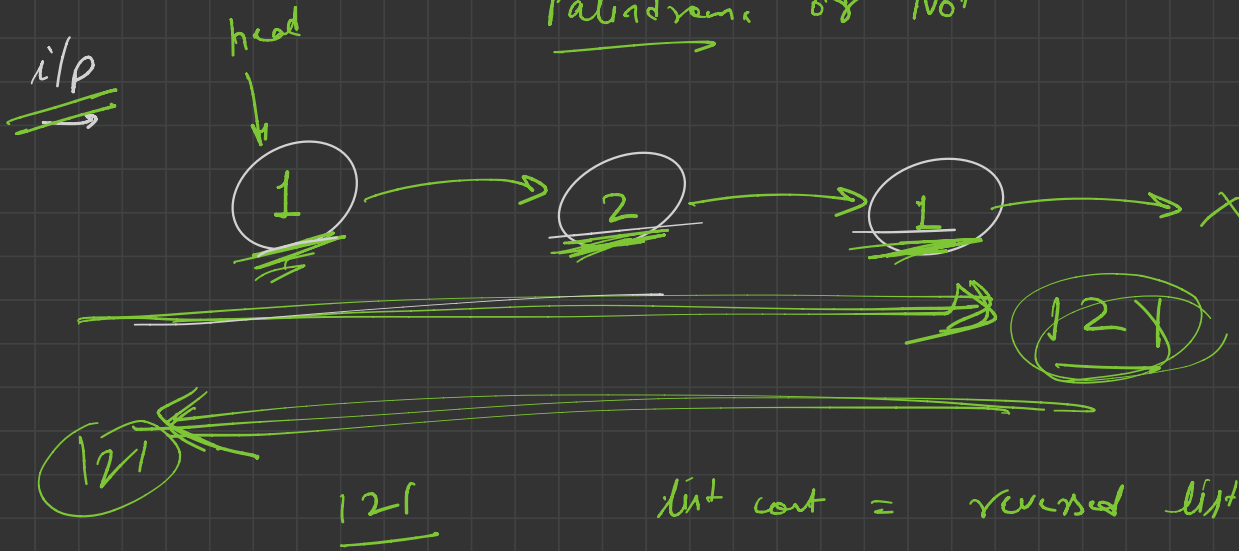



Palindrome Linked List

Palindrome or Not

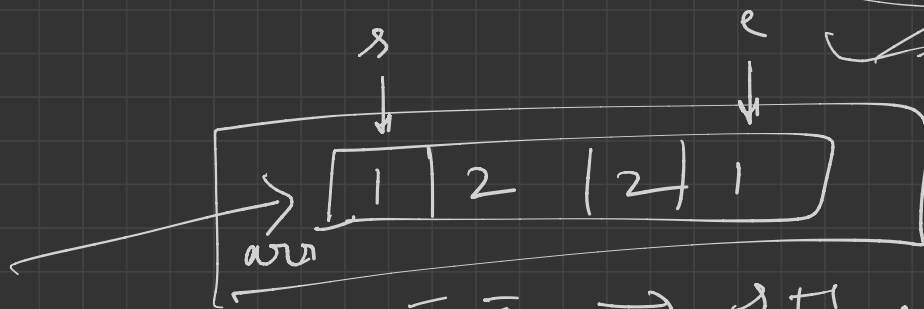


Approach:-

Intuition

string / []

string str = "abccba"



== $\rightarrow s++ , e--$] $\rightarrow s \leq e$

{ $\neq \rightarrow$ Not palin

$s > e$
palindrome

Logic

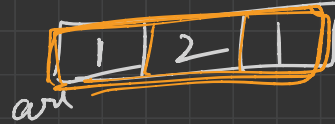
Approach #1



Algo:-

(I) → create an array

(II) → copy LL content into array → $O(N)$



(III) → write logic to check palindrome or not

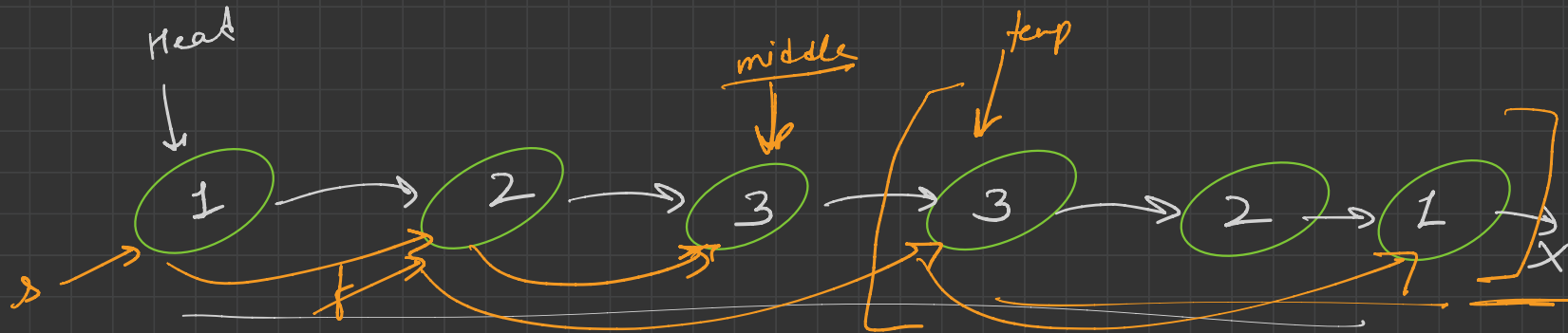
T.C → $O(N)$

S.C → $O(N)$

$O(1)$ → ?

$\frac{N}{2}$ → $O(N)$

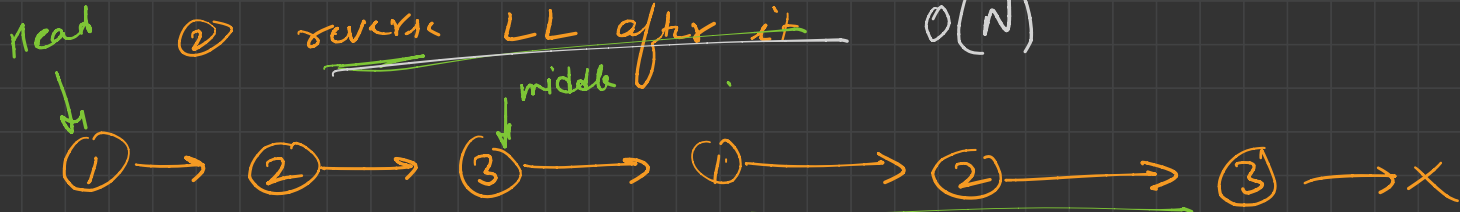
Approach #2:-



Algo:-

① Middle (find) $\rightarrow O(N)$

② reverse LL after it $O(N)$



③ compare both halves PL or not $O(N)$

④ repeat 2nd step $O(N)$

Head
↓



T.C → $O(N)$

S.C → $O(1)$

