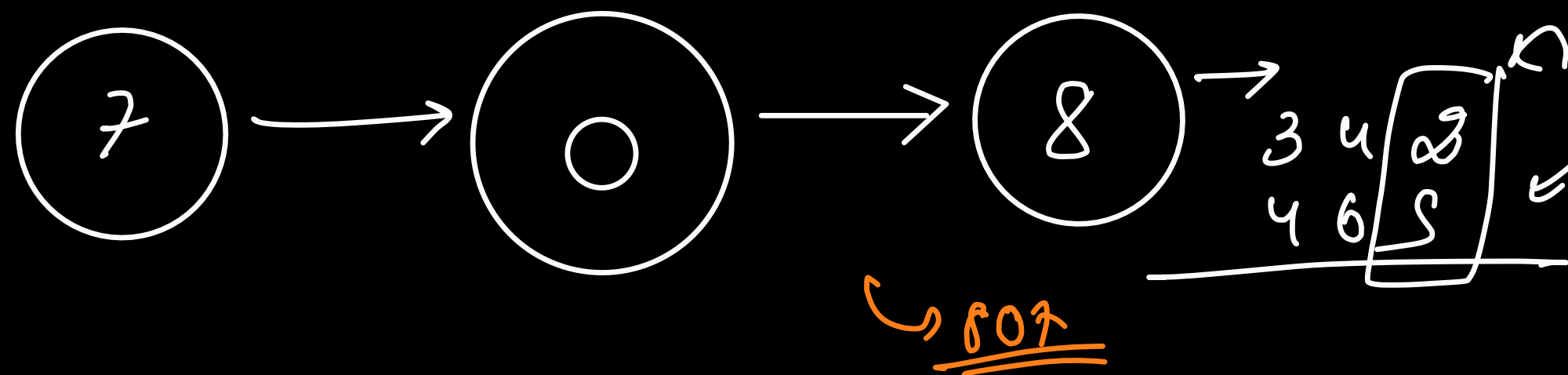
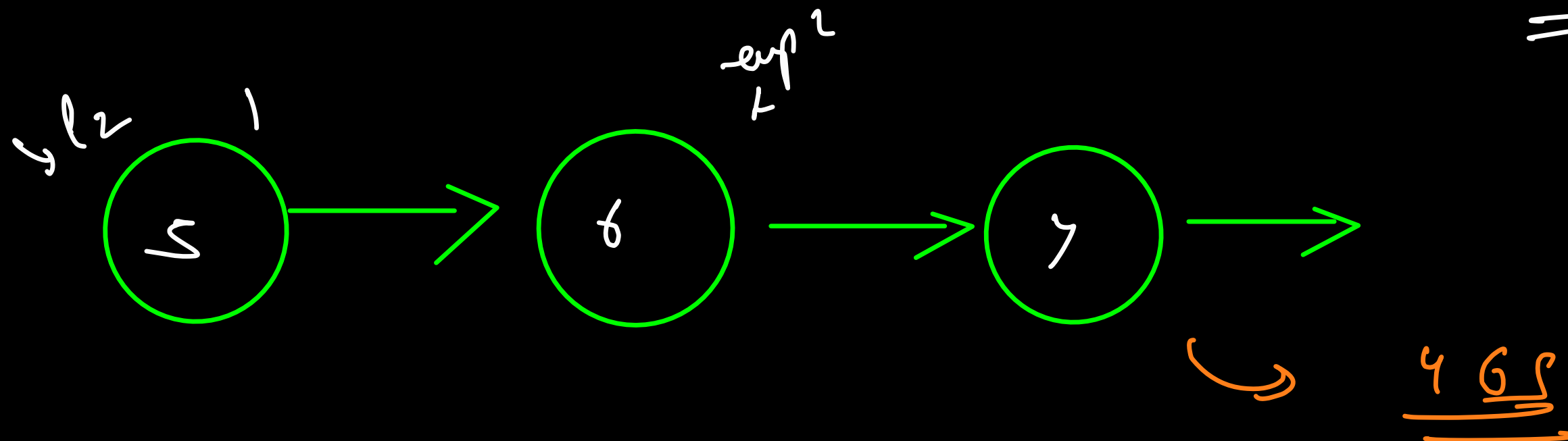
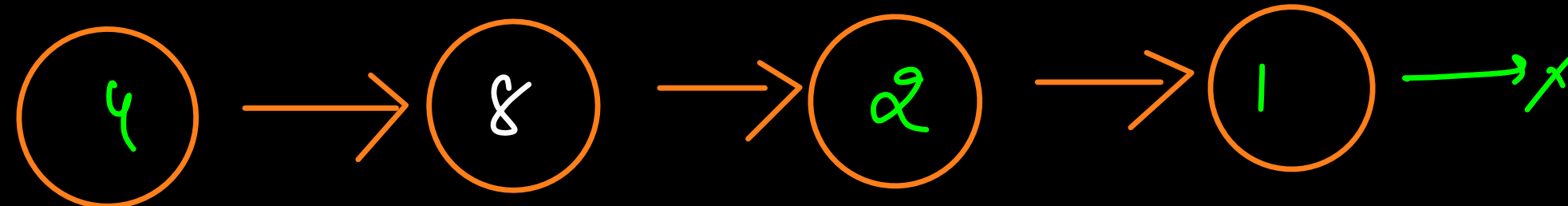


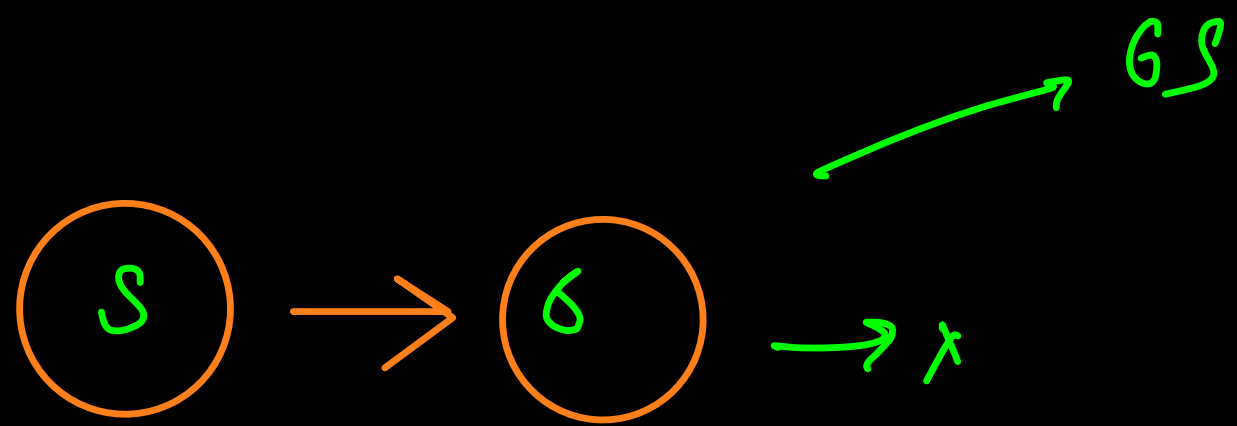
Carry = 0



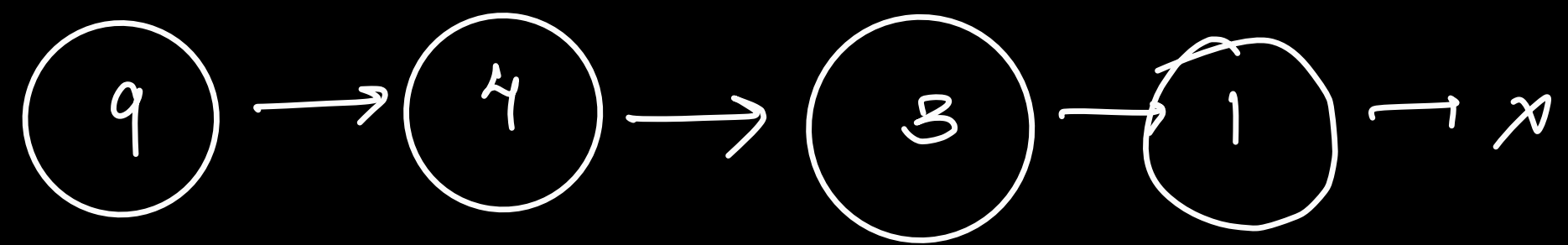


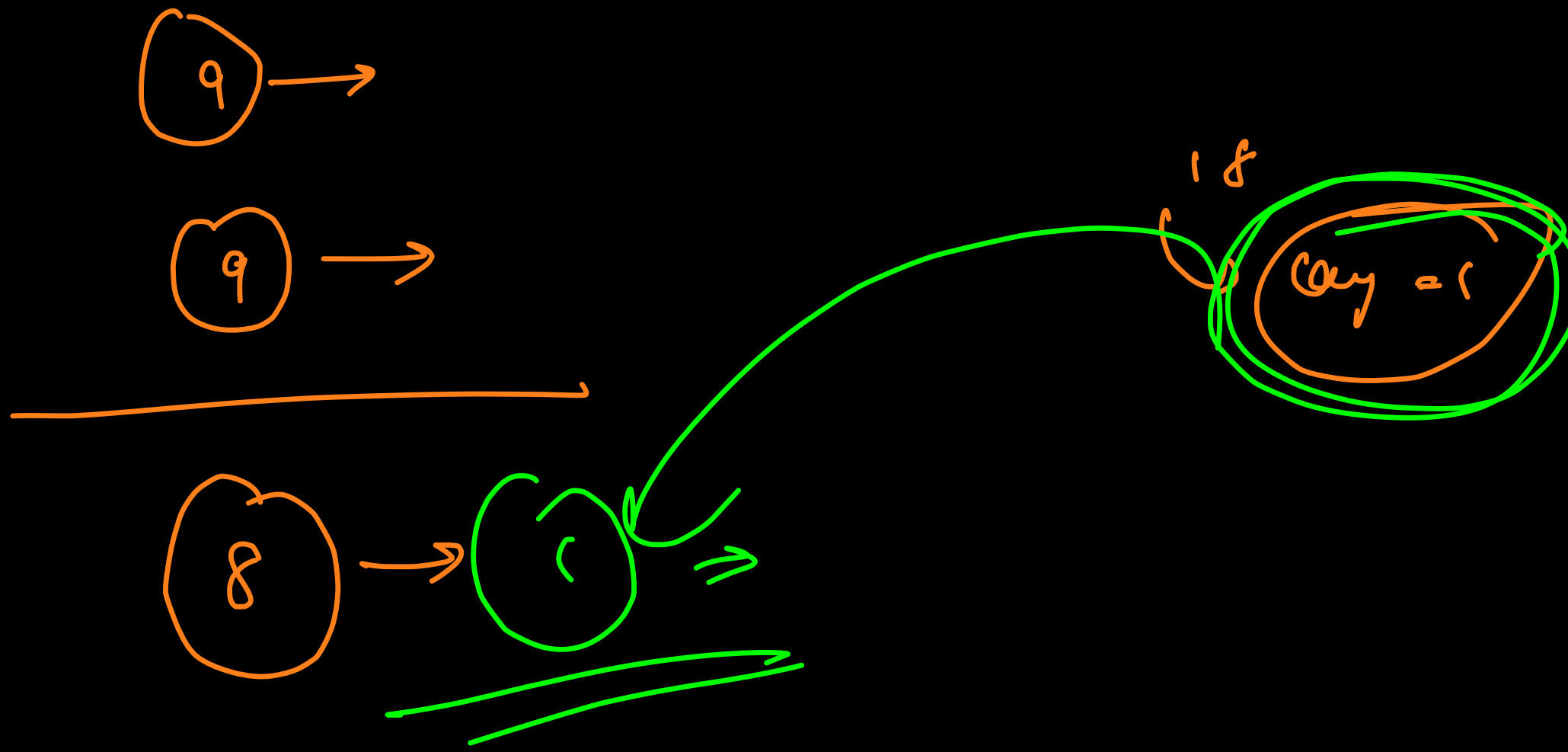
1289

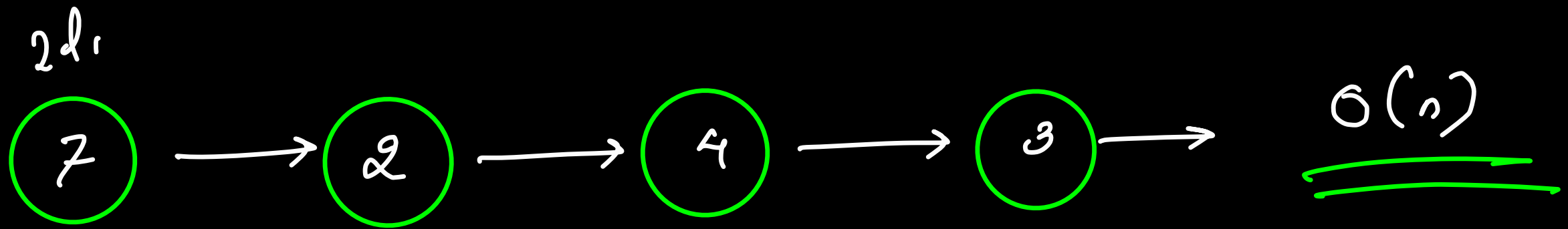
$$\begin{array}{r} 1 \\ 1289 \\ \underline{85} \\ 1399 \end{array}$$



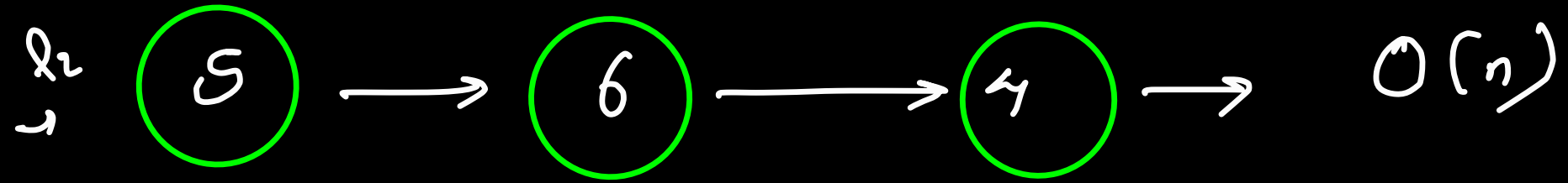
Carry = ~~0~~ / ~~0~~
14



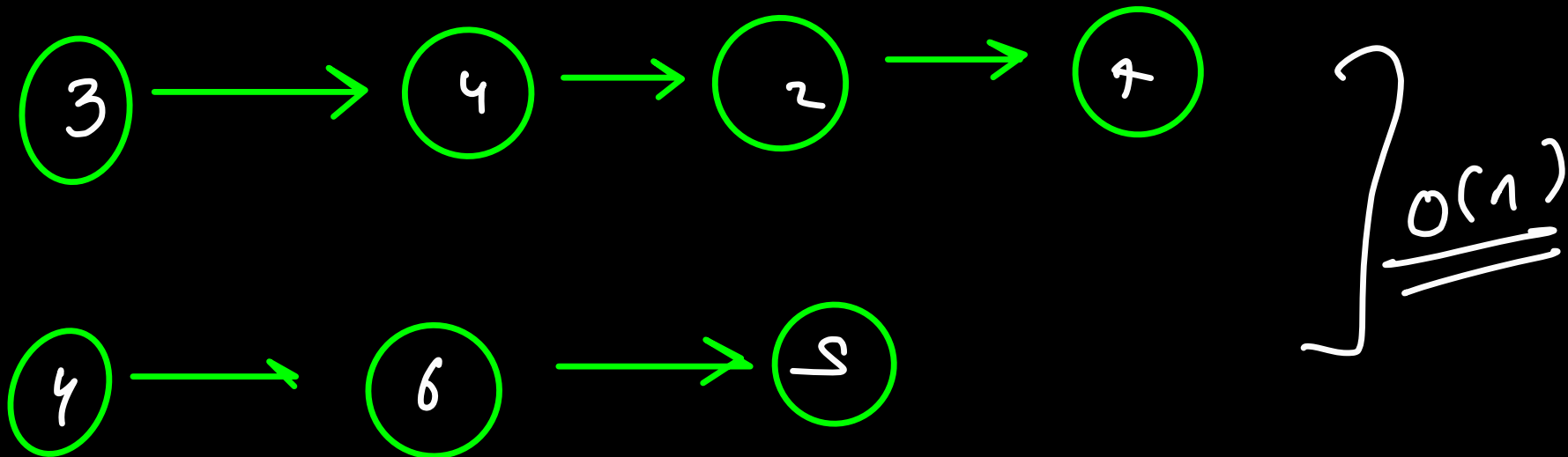


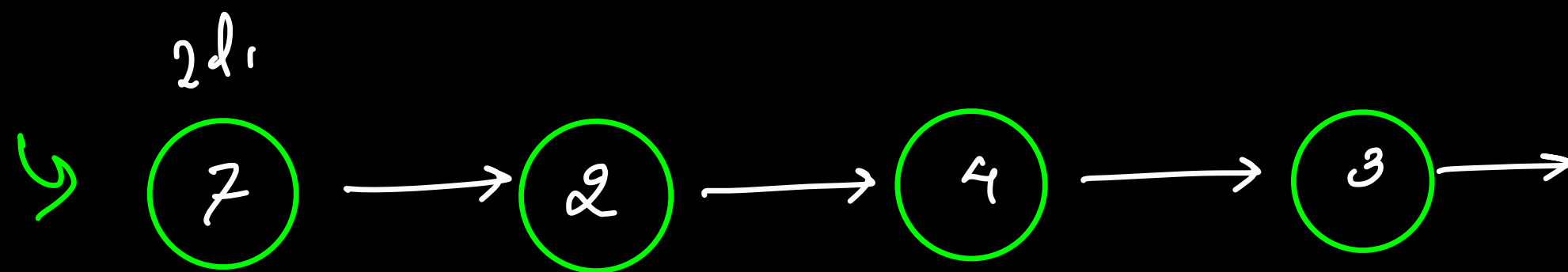


iteration
keep pointer

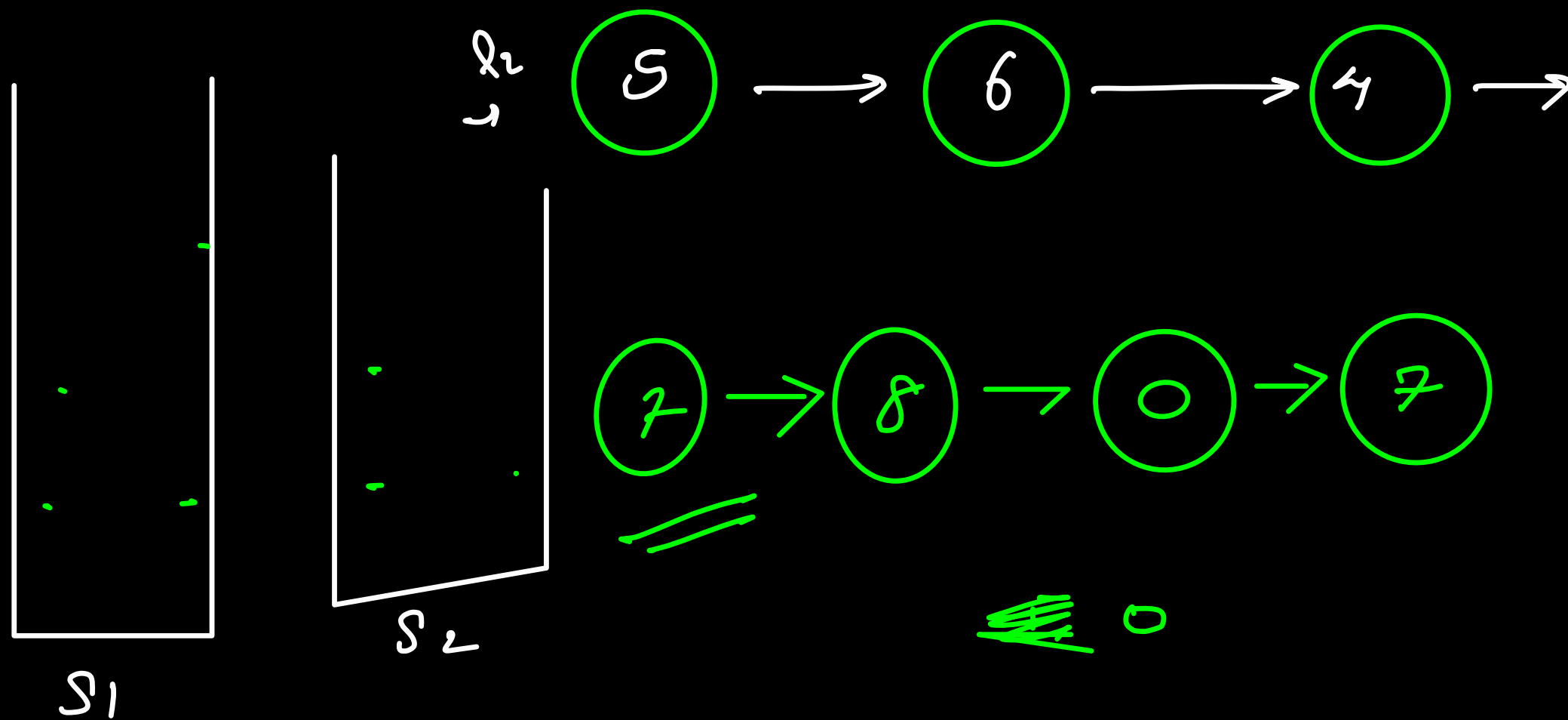


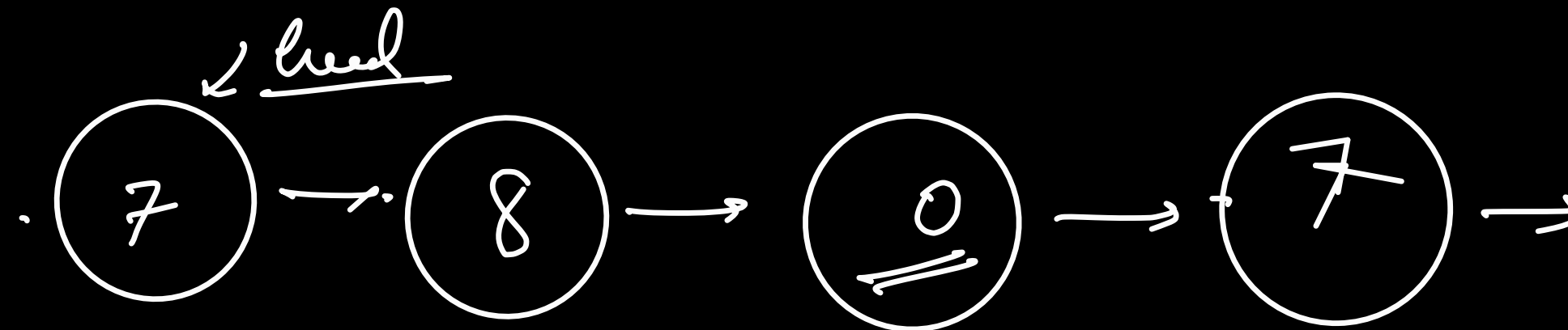
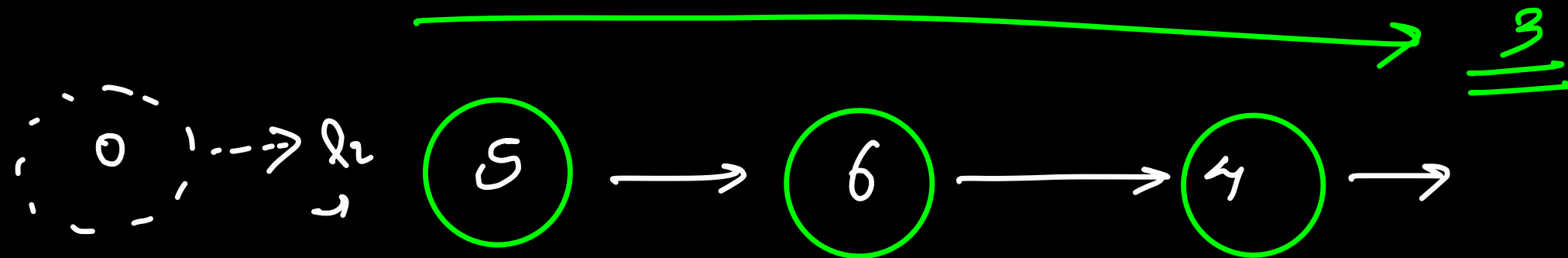
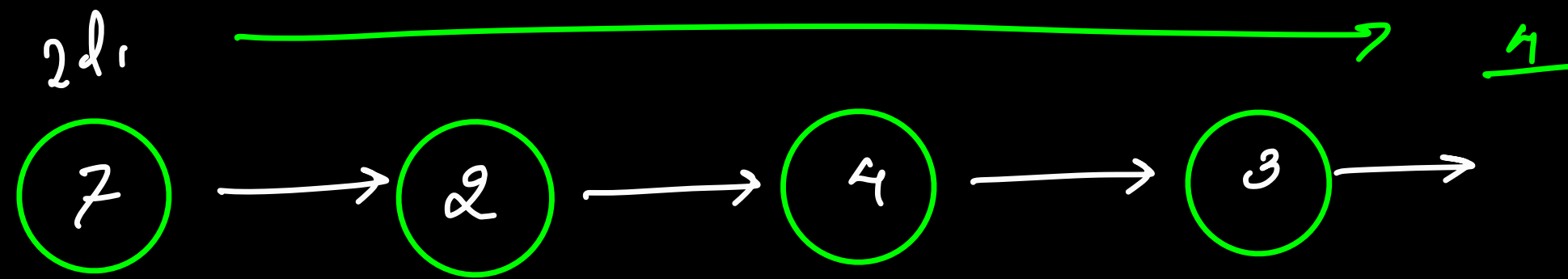
#A.1 →





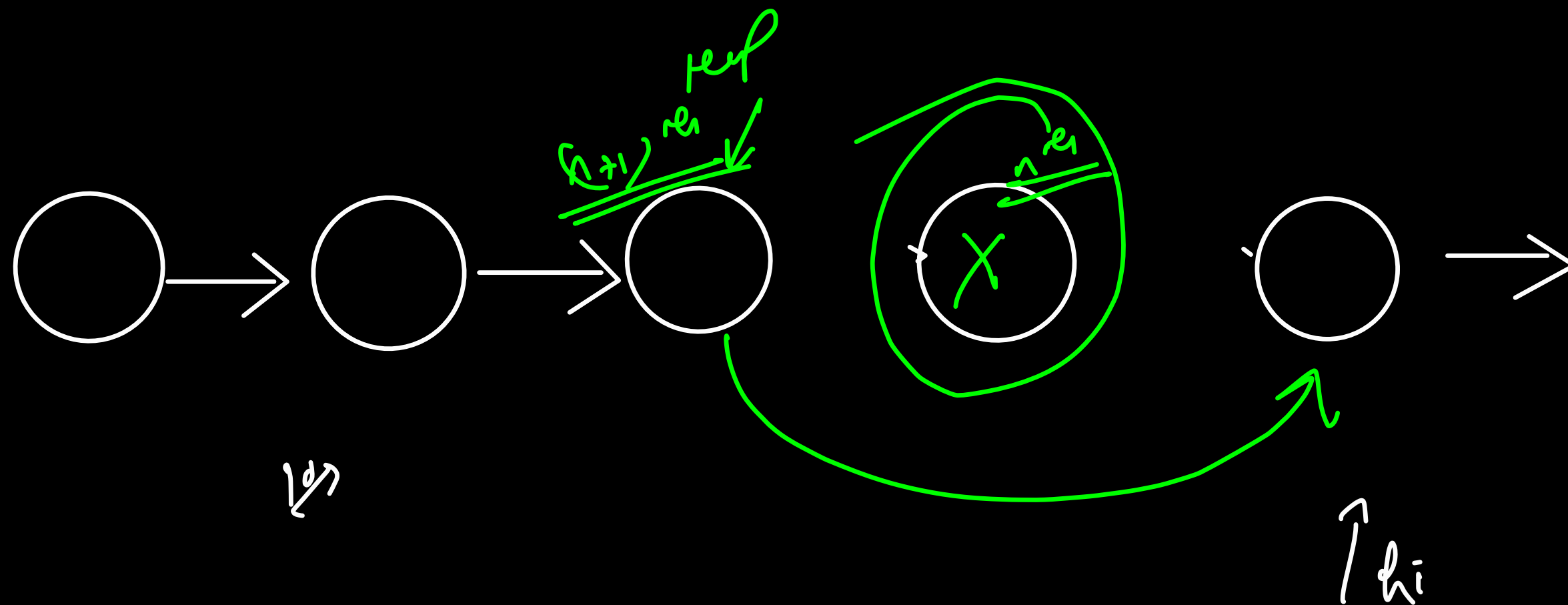
$O(n)$
Space $\rightarrow O(1)$



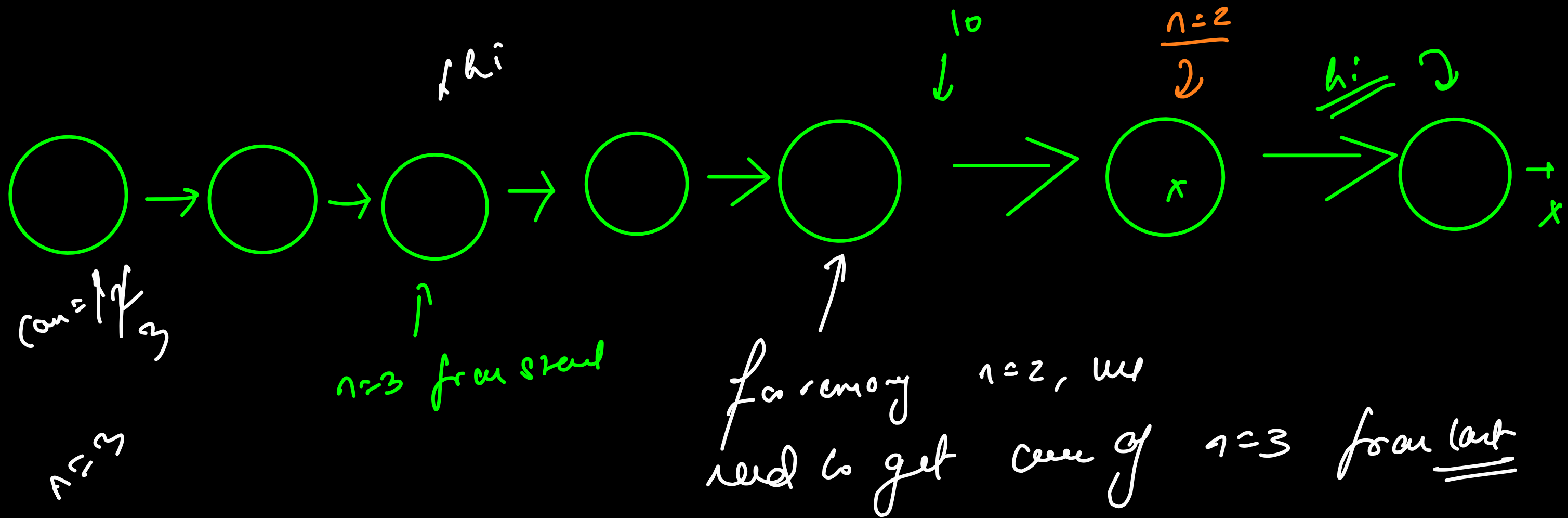


4-3 → ①

$O(n)$



$n=4$

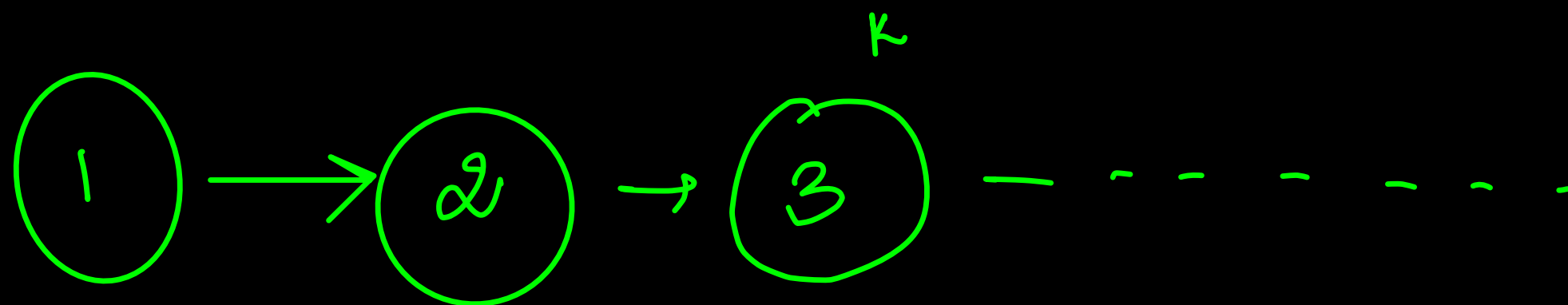
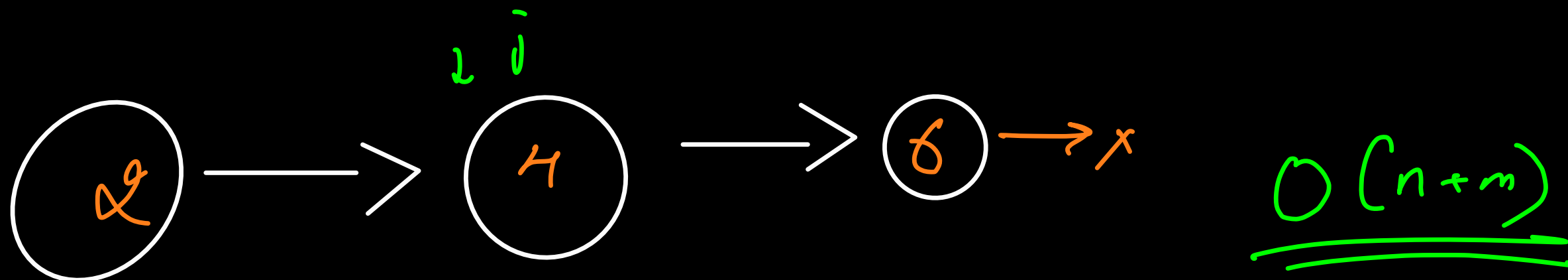
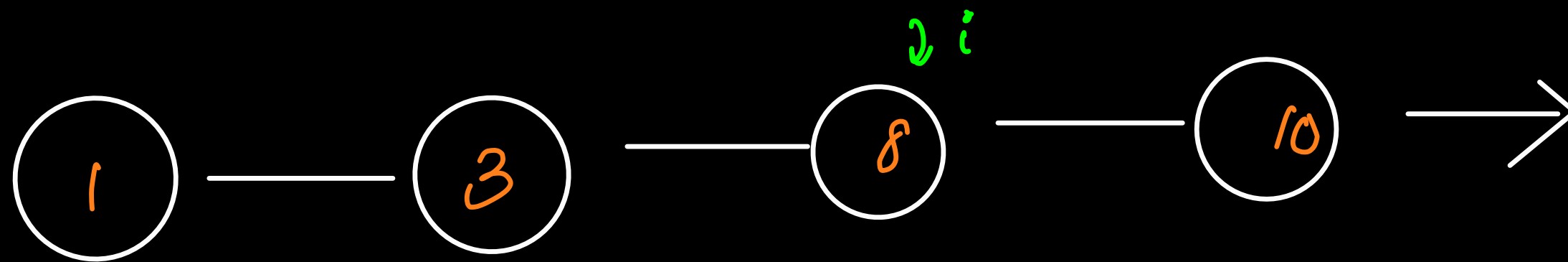


2 pointer

$O(n)$
 $O(1)$

Merge 2
sorted arrays

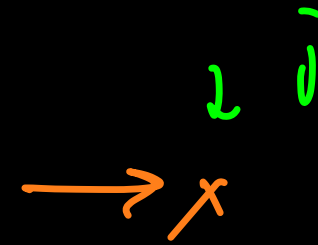
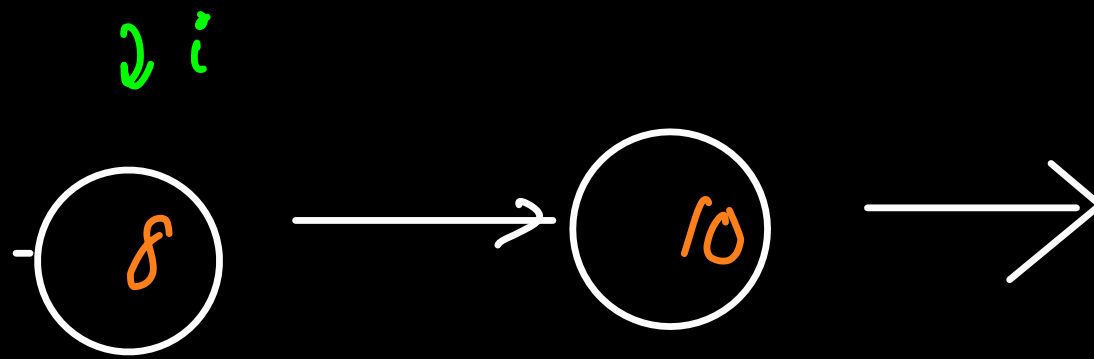
} → 2 pointers



$O(n+m)$

$O(1)$

temp.next = i



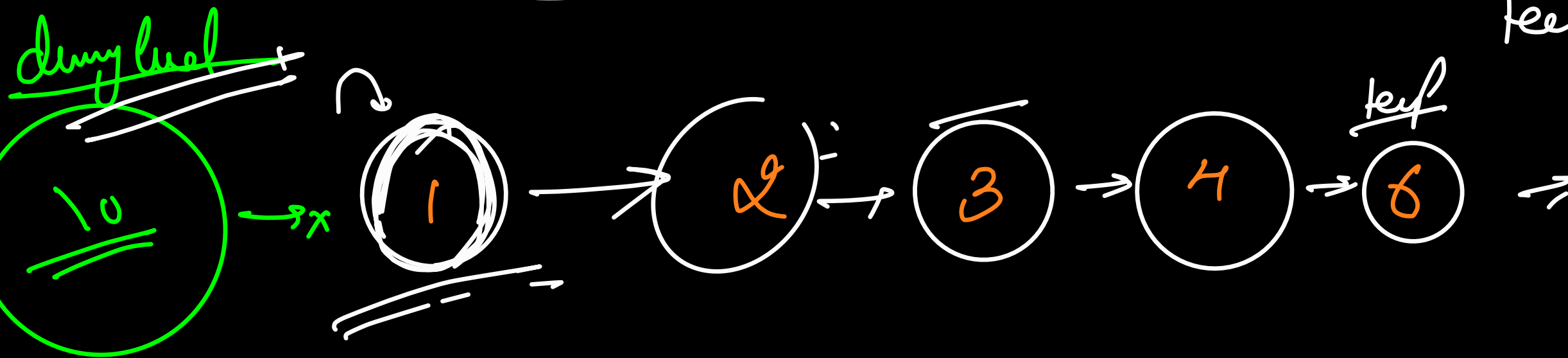
return dummyhead.next

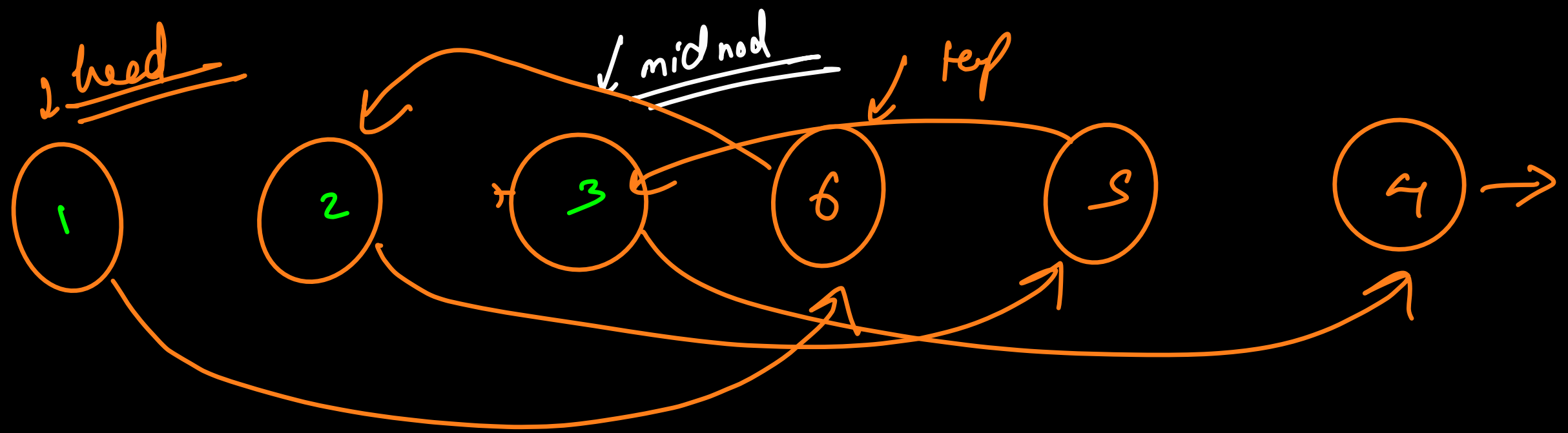
temp.next = i

temp = temp.next

i = i.next

temp.next = null





1) go & calc midnode $\rightarrow O(n)$

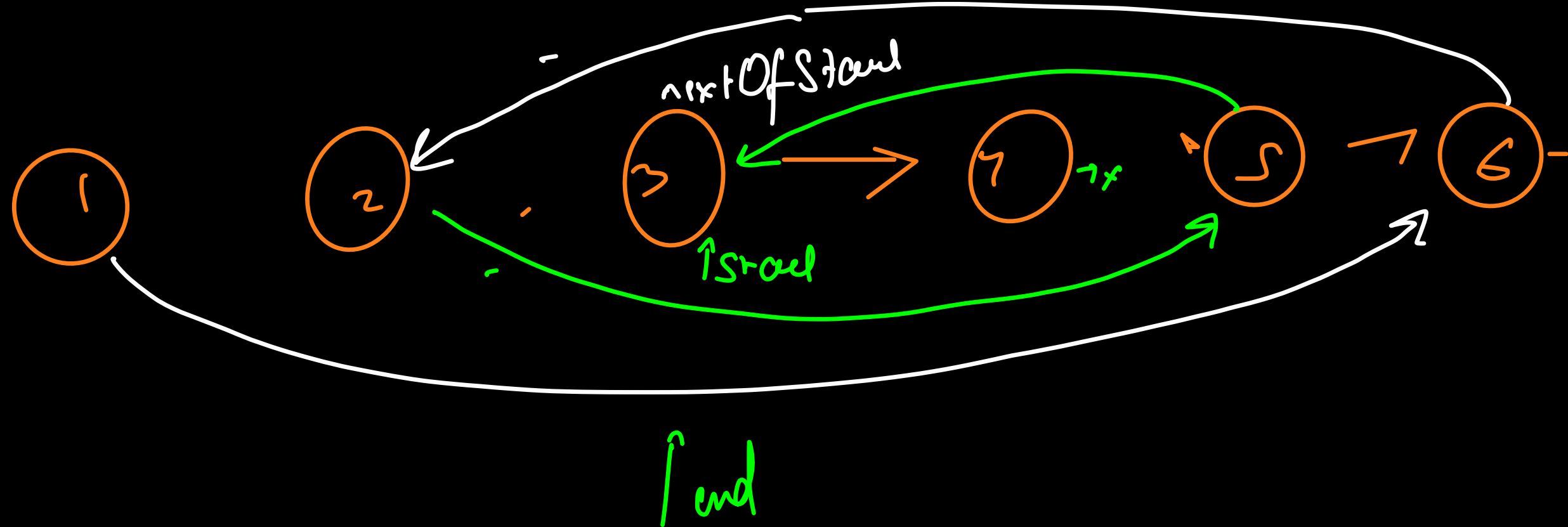
temp = midnode.next

midnode.next = null

2) Reverse the 2nd part $\rightarrow O(n)$

3) Merge $\rightarrow O(n)$

$$\frac{O(n)}{O(1)}$$



if (start.next == null)
end.next = null

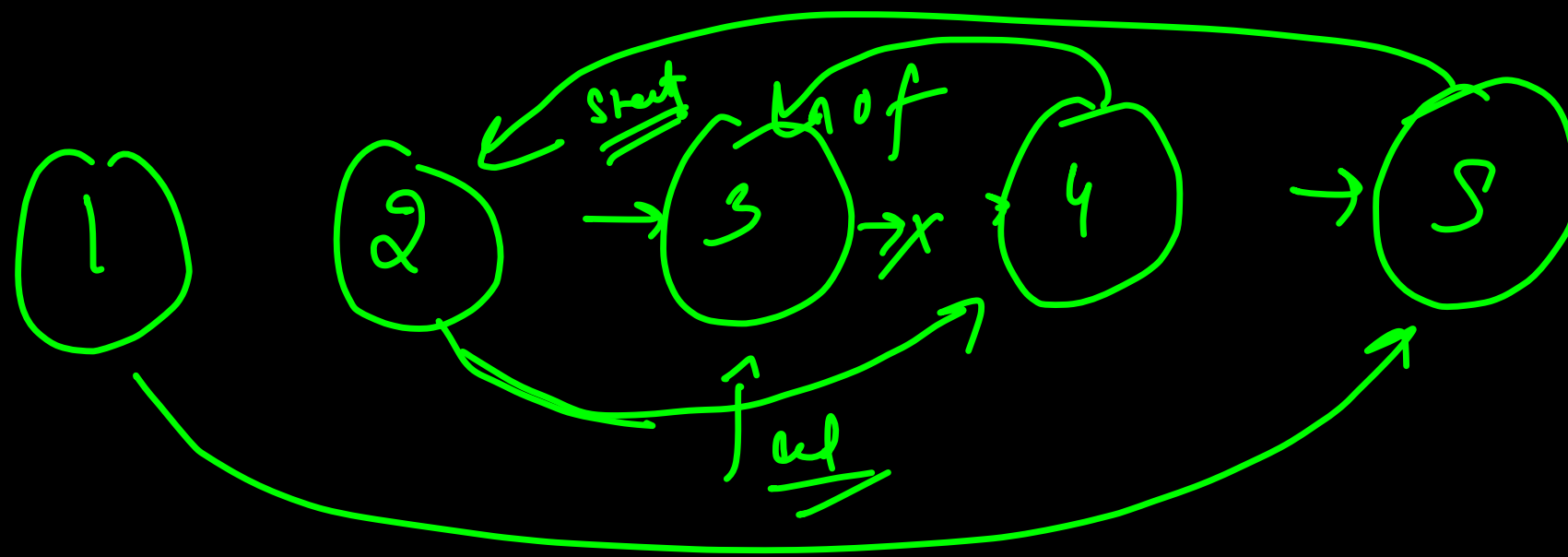
nextOfStart = start.next

start.next = end

end.next = nextOfStart

start = nextOfStart

return



if (start.next == null or start == null)
end.next = null

next of start = start.next

start.next = end

end.next = next of start

start = next of start

return n

~~$O(n)$~~
 ~~$O(n)$~~

