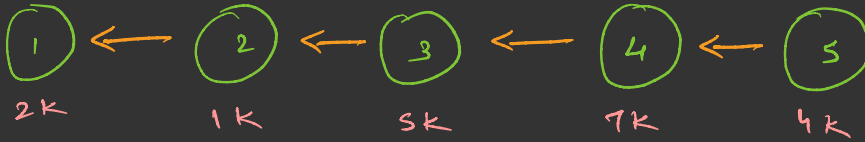


Reverse Data



Reverse Pointers



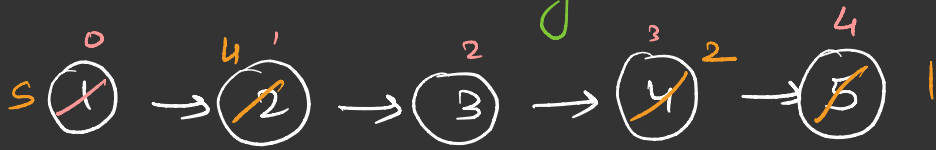
Reverse D I

Reverse D R

Reverse P I

Reverse P R

Reverse Data Iteratively



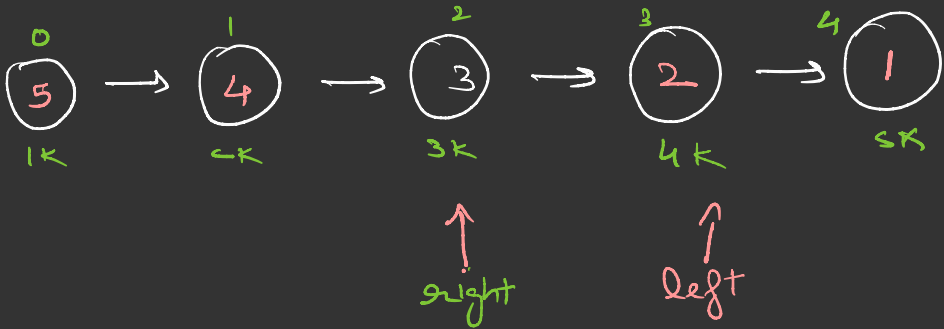
↑ ↑
2 2

TC $\Rightarrow O(n^2)$

$2i = 4 \neq 2$

$2 \geq \text{size} / 2$

Reverse Data Recursively



RDR(Node right, $2i$)

if ($2i == \text{null}$) return;

RDR(right.next, $2i + 1$)

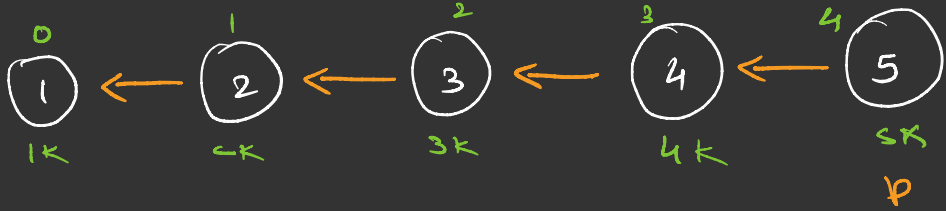
if ($2i \geq \text{size} / 2$) {
 swap(left, right);

3 2 = 2.next;

RDR(2K)
RDR(1K)

TC $\Rightarrow O(n)$

Reverse Pointer Iterative



$p = \text{null}$

$c = \text{head}$

$n = c.\text{next}$

3 pointer approach

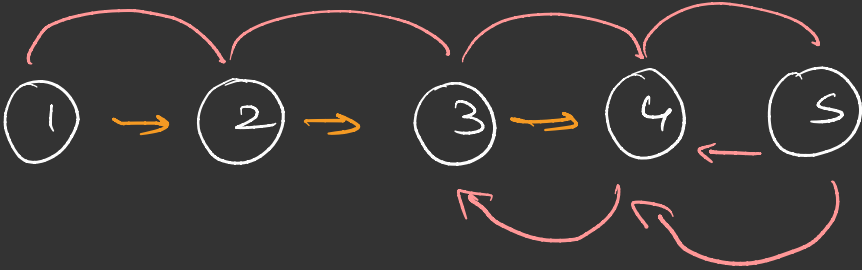
$n = c.\text{next}$

$c.\text{next} = p$

$p = c$

$c = n$

Reverse Pointer Recursive



$\text{RPR}(\text{Node } n)$

if ($n.\text{next} == \text{null}$) return;

$\text{RPR}(n.\text{next})$

$n.\text{next}.\text{next} = n;$

$n.\text{next} = \text{null};$