

Data Structures

Some Drawing 4 Solutions

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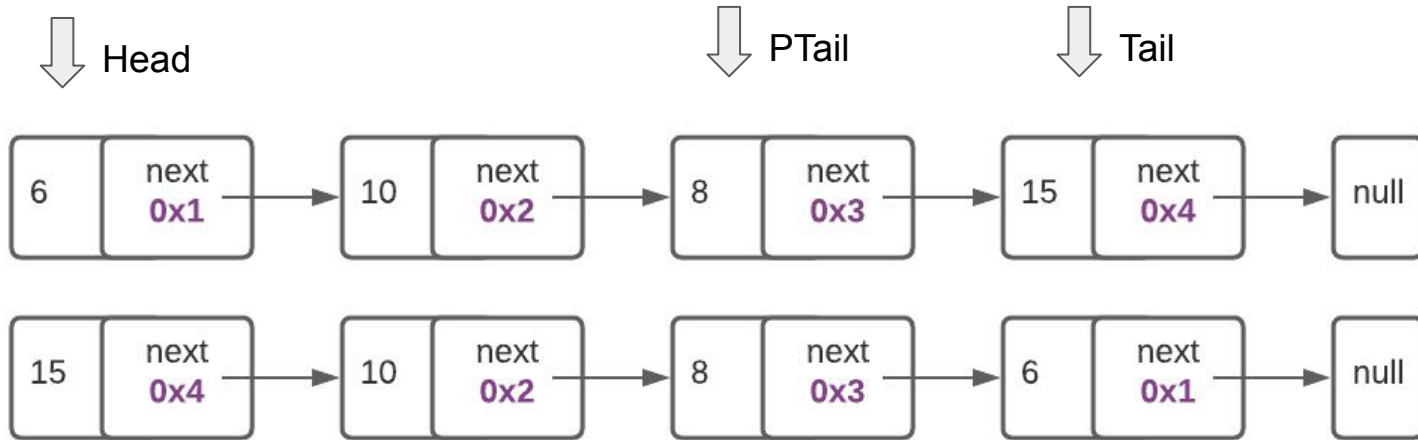
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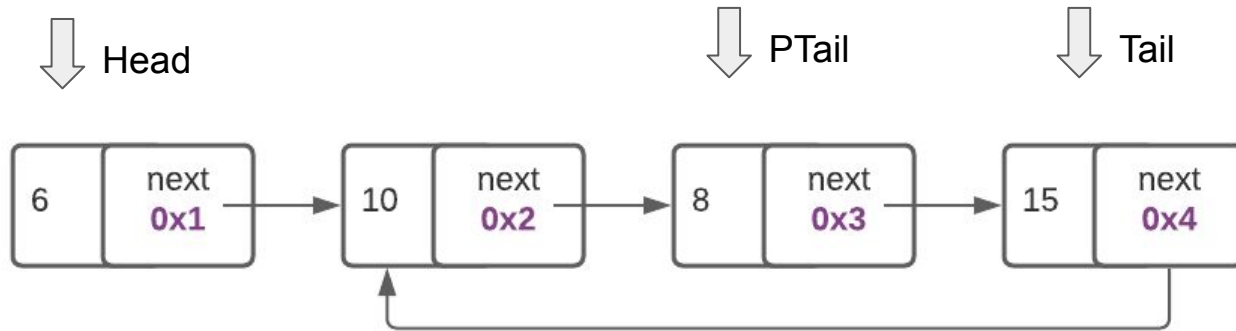
Problem #1: Swap head and tail

- To achieve the target, we need to connect the tail to the 2nd node
- And the node before tail to the head and cancel the head
- In other words, swapping actual nodes



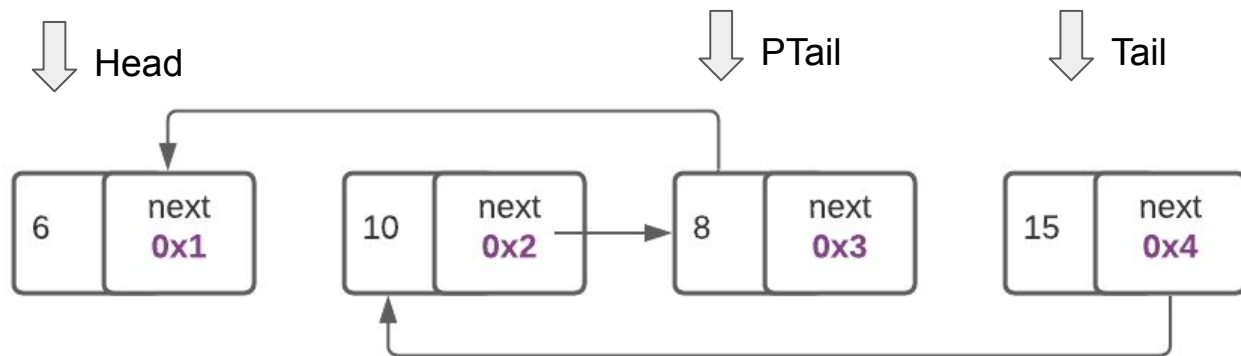
Problem #1: Swap head and tail

- Compute the node before the tail
- Create circle: connect Tail to Head's next



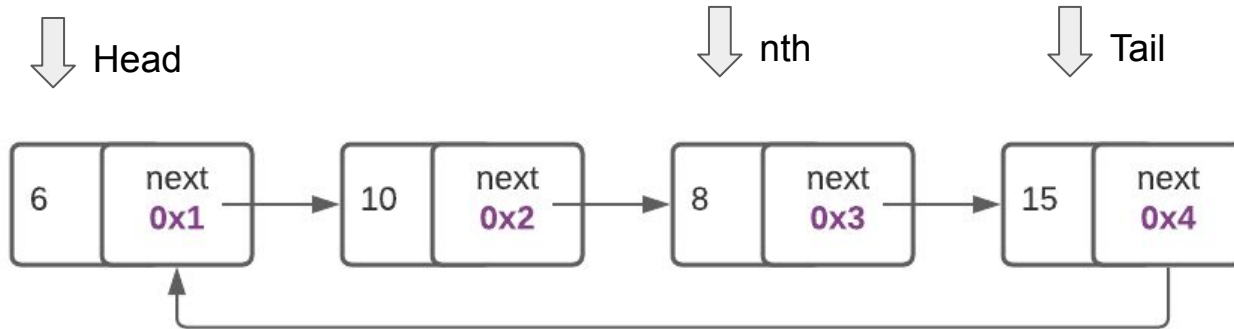
Problem #1: Swap head and tail

- Connect PTail with head and cancel head's next
- Now items are swapped



Problem #2: Left Rotate

- Assume $n = 3$: Find n th node
- Connect Circle



Problem #2: Left Rotate

- Now, prepare the nth node to be the new tail and after it the new head
- What about huge K? Just use $k \% \text{length}$ to remove useless cycles
 - Think like clock: every 12 hours are not useless

