Approach#1 → Maintain 2 Queues: lesser, greater

Prblm

x = 3

lesser:

1	2	2

Greater

4	3	5

Finally merge the 2 Queues together to form the soln.

Time: O(n) & Space = O(n)

Approach #2 : Space efficient : Rearrange nodes

Maintain 5 pointers : lt, ltStart, gt, gtStart, current

Keeps track of all nodes with val < x

Starting node

Keeps track of all nodes with val >= x

Starting node

current node being evaluated

Prblm: 

x=3

Initial States: curr=head; lt=ltStart=null; gt=gtStart=null

curr= 1

lt=ltStart

gt= gtStart= null

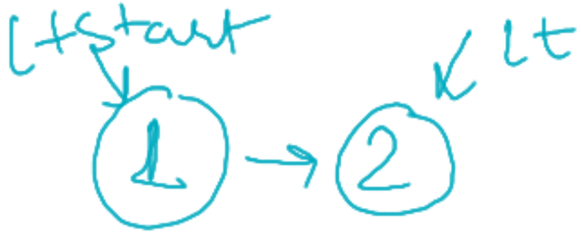
curr= 4

lt=ltStart

gt=gtStart

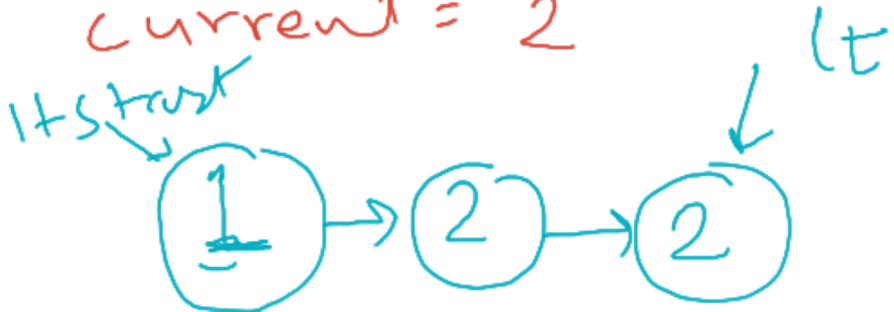
current = 3

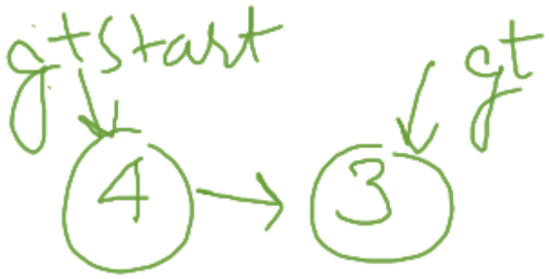
current = 2

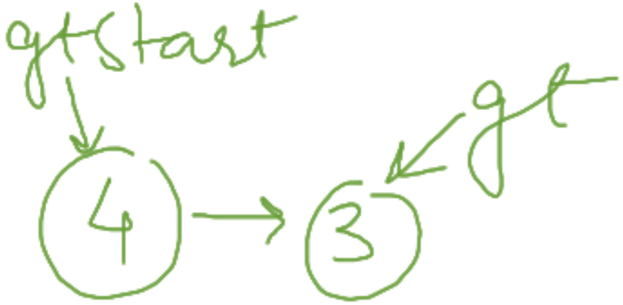


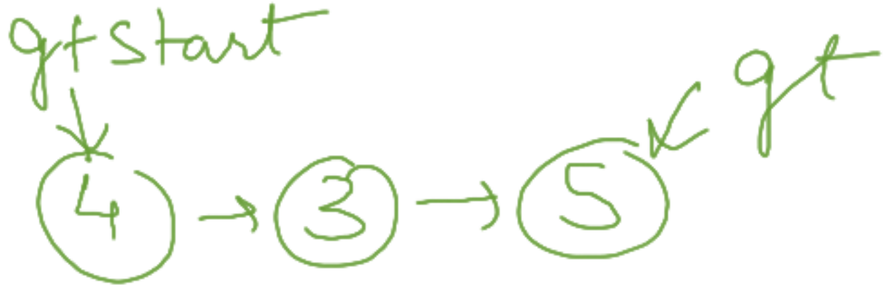
current = 5

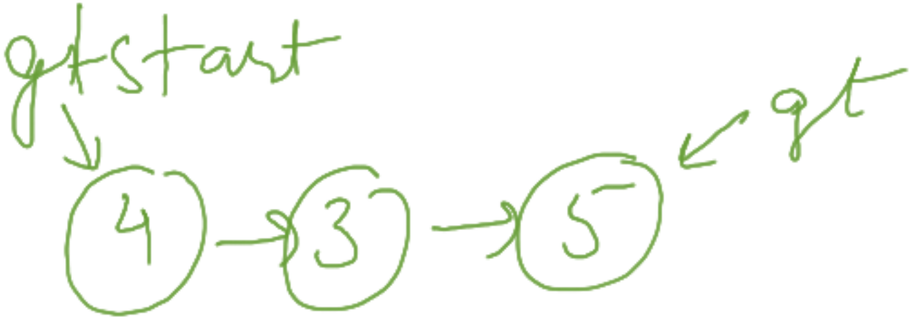
current = 2







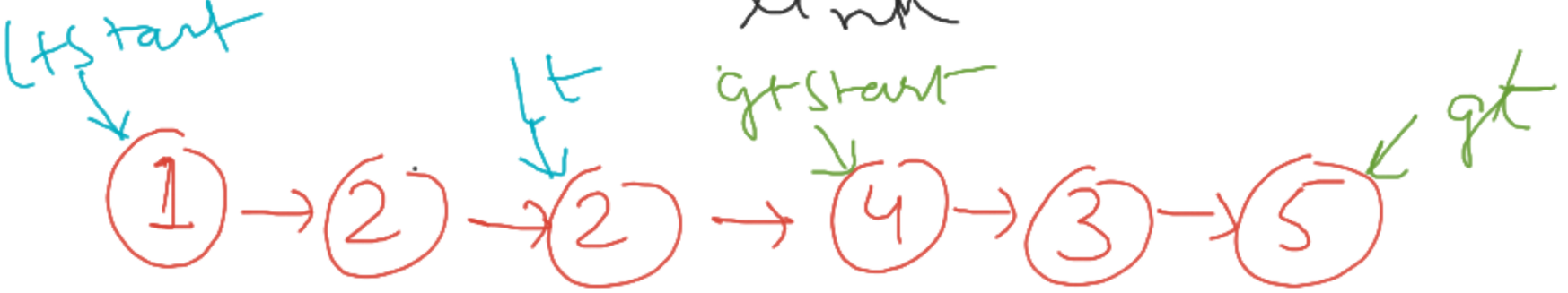




Firally :

link

Soln :



Time = O(n) ; Space = O(1)