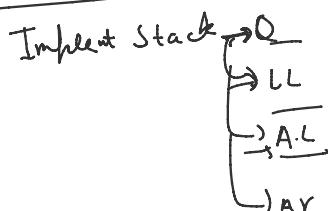
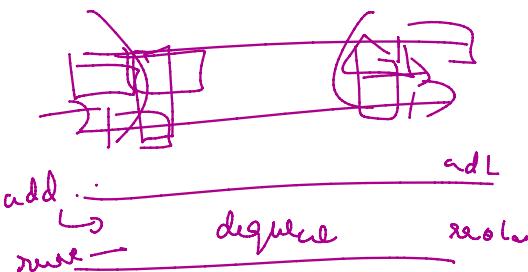


Math. box ($\cup \cap$)
doubt
S(n. nest Int ())
if \downarrow long . nest Ty ()



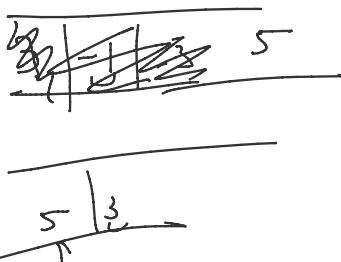
| | \uparrow L L head. | \uparrow L L word tail | double word tail |
|------------|----------------------------|--------------------------------|------------------|
| Add Fwd | $O(1)$ | $O(1)$ | $O(1)$ |
| Remove Fwd | $O(1)$ | $O(1)$ | $O(1)$ |
| Add Lat | $O(n)$ | $O(1)$ | $O(1)$ |
| Rem Lat | $O(n)$ | $O(n)$ | $O(n)$ |



5, 4, 3, 2, 1 k-1

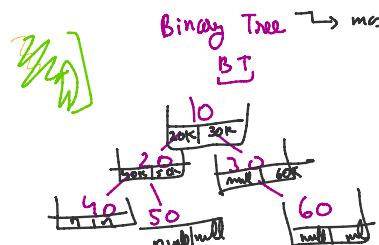
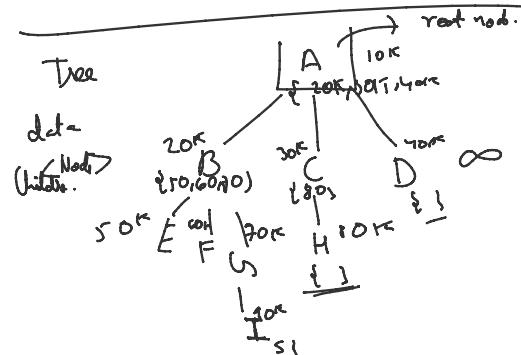
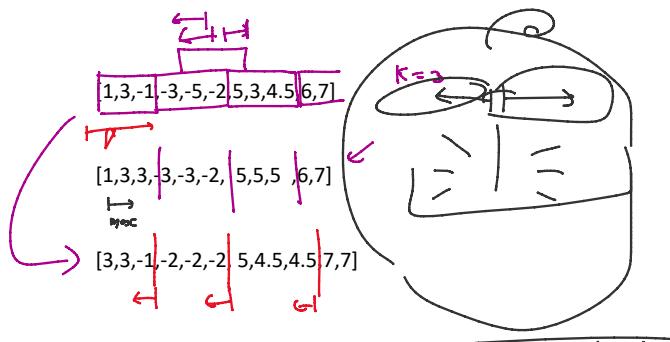
Window position Max

| | | | | | | |
|---------------------|----|---|---|---|---|---|
| [1 3 -1] | -3 | 5 | 3 | 6 | 7 | 3 |
| 1 [3 -1 -3] | 5 | 3 | 6 | 7 | | 3 |
| 1 3 [-1 -3] | 5 | 3 | 6 | 7 | | 5 |
| 1 3 -1 [-3 5 3] | 6 | 7 | | | | 5 |
| 1 3 -1 -3 [5 3 6] | 7 | | | | | 6 |
| 1 3 -1 -3 5 [3 6 7] | | | | | | 7 |



[1,3,-1,-3,-5,-2,5,3,4,5,6,7]

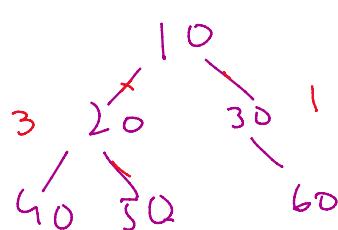
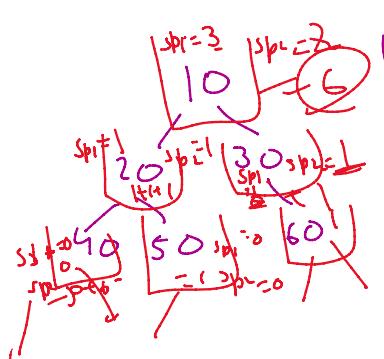
From: <https://leetcode.com/problems/sliding-window-maximum/>



private void print(Node nn){
 if(nn==null){
 return;
 }
 System.out.println(nn.data);
 print(nn.left);
 print(nn.right);
}

S-L-R → Pre
L-S-R → In
L-R-S → Post

10, 20, 40, 50, 70, 30, 60



$100 \nearrow 90$
 $110 \searrow$
Dia \rightarrow max dist b/w 2 nodes.

