

High resistant (- - -)

See a problem => Read

30 minutes

haven't made any progress

must take notes

\* What did I miss?

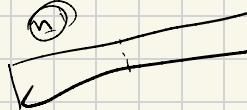
→ common errors

→ how did they approach it?

\* How

→ capable of solving this problem?

\* Am I



→ mind

Given 2 arrays with length n and m -  
and they are sorted. Now, merge them  
and then find the median element.

$$5 \quad 6 \quad [7, \quad 2 \ 9] \quad 2 \ 5 \quad 2 \ 6$$

$$\frac{7+29}{2} = 15.5$$

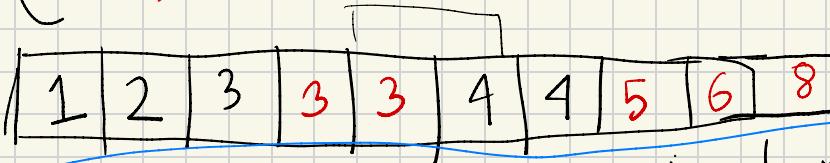
$$a = [1, 2, 3, 4, 5, 6] \quad b = [1, 2, 3, 9]$$

$$1, 1, 2, 2, [3, 3], 4, 9, 5, 6,$$

$$\frac{3+3}{2} = 3$$

merge sort:  $O(n+m)$   $O(n \cdot \log n)$

$$a = [1] (2) 3 (4) 5 6] \uparrow \quad b = (3) 3, 4, 8 \uparrow$$



HW: Write a function that merges  
two sorted arrays.

$[1, 2, 3]$   $[4, 5, 6]$   $[7, 8]$  ]

$\boxed{3, 4}$

⑥  $x, y \Rightarrow x + y \leq \text{median}$   
2 elem from b  
2 elem f

\* median

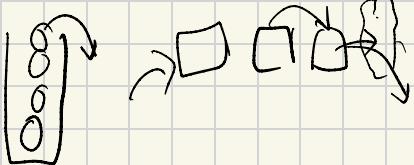
1 elem from b

3 elem from a

Solving  $100^{\text{th}}$  easy problems

Semester 2<sup>o</sup>

Stack, Queue, Deque



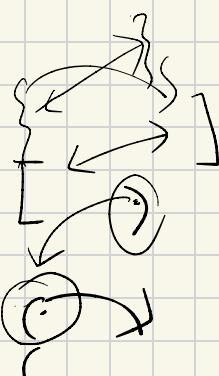
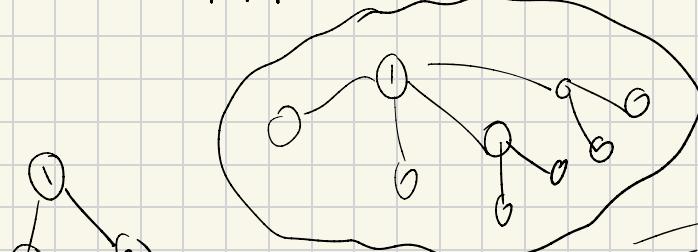
monotonic structure  
↓  
mono tone  
one

Try to solve this problem.

doesn't improve solving skills that much.

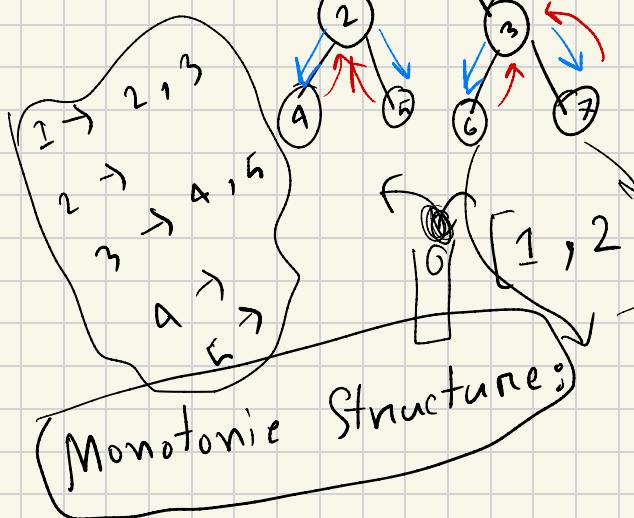
# parenthesis matching

$\rightarrow ((\{)) \{ ([\ ])\} \{ (\ )$



BFS | DFS.

Pre orden Traversal



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

I wonder  
post orden

H.W.

