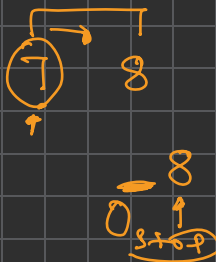
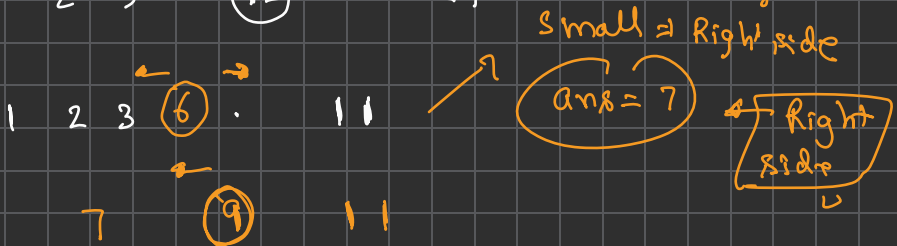
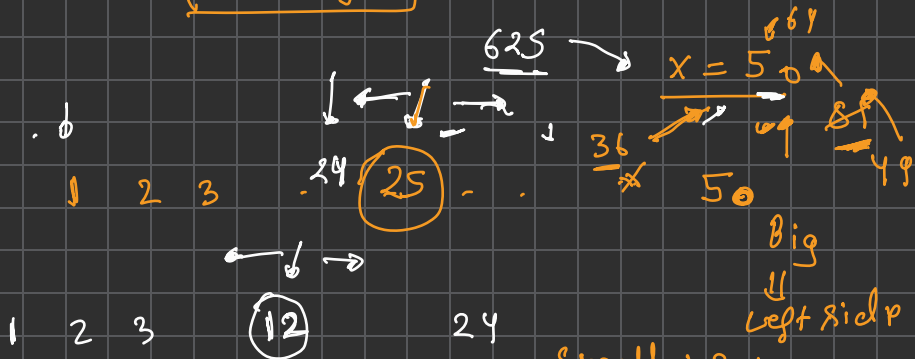
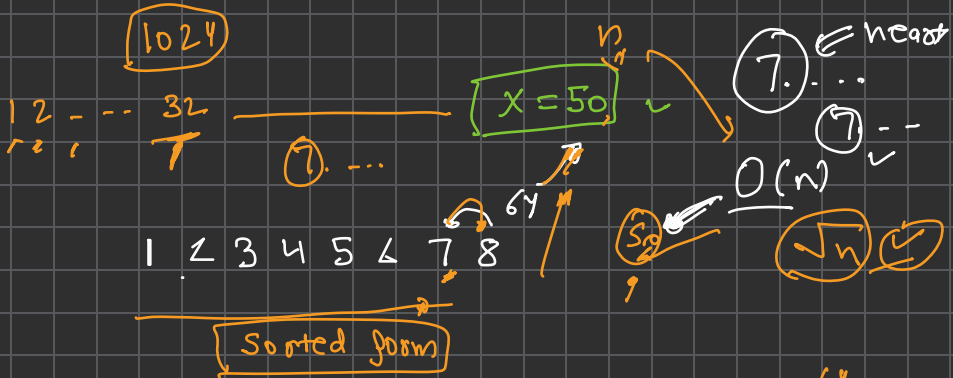
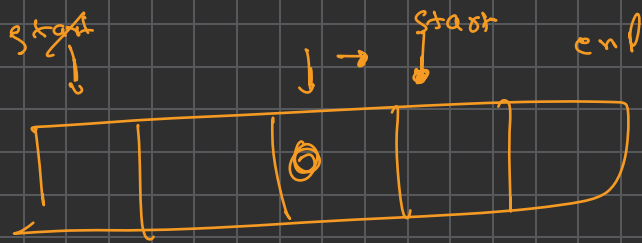


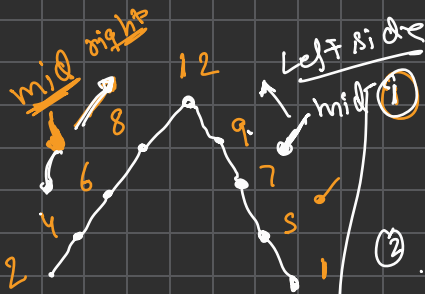
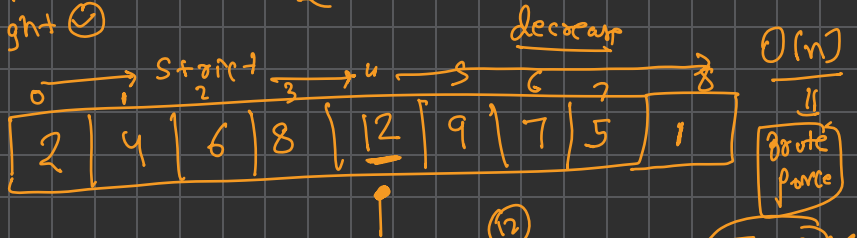
1 2 3 4 ⑤





Left (✓)  
Right (✓)

$end = mid - 1$



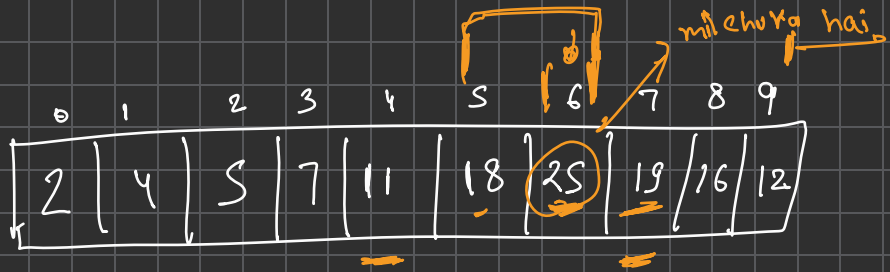
(1)  $mid = \frac{start + end}{2}$

(2) if  $(arr[mid] > arr[mid-1])$   
 or  $arr[mid] > arr[mid+1])$   
 return mid

(3) else if  $(arr[mid] > arr[mid-1])$   
 $start = mid + 1$

(3) else  
 $end = mid$

TLB ✓

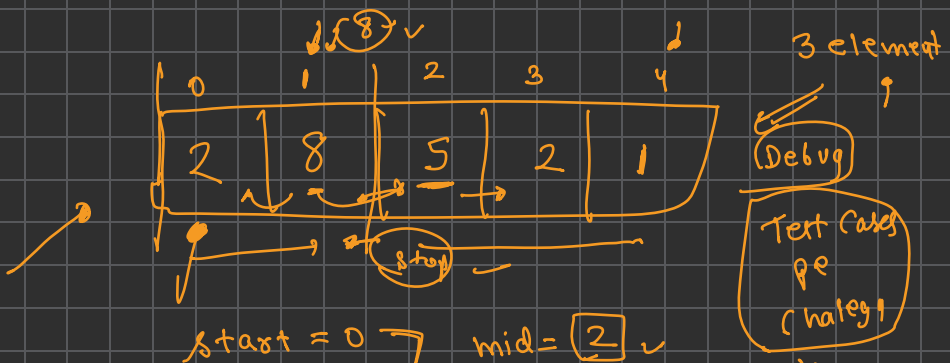


Increasing order:

→ Right side

Decreasing order:

← Left side



start = 0

end = 4

mid = 2

mid = start + (end - start) / 2

ing

6 8 4

mid = end + (start - end) / 2

= 1 + (0 - 1) / 2

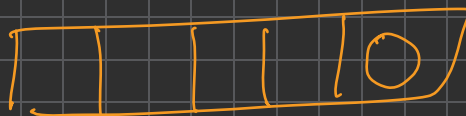
= 1

mid

How many

Kab

Last element



10 | 20 | 30 | 40 | 50 ⇒ check

1 | 2 | 3 | 4 | 5 | 6

strictly

↓  
time

Min ✓

6 1 2 3 4 5

minimum element (Min)

5 6 1 2 3 4

Linear Search  
minimum  $O(n)$

4 | 5 | 6 | 1 | 2 | 3

↓  
decrease  
increase  
↑

left (✓)  
right (✓)

Every Element

Sorted from Left side

Sorted from right side

$arr[mid] > arr[0]$

$arr[mid] < arr[0]$

