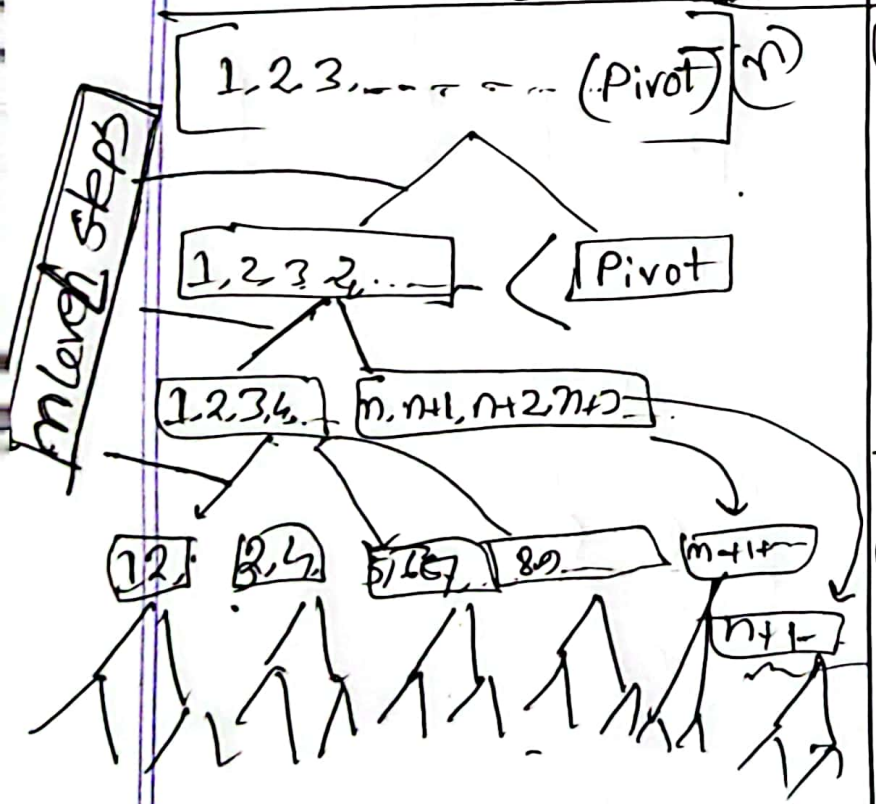
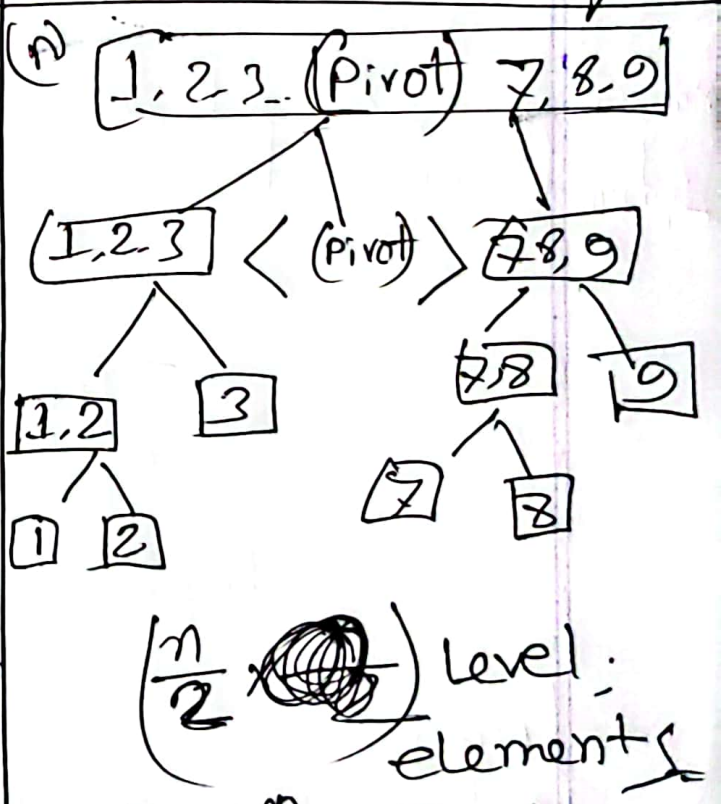
Answer – 6

(*) Worst case time complexity of QuickShort
$= O(n^2)$

(*) Average case time complexity of QuickShort
$= O(n \log n)$

Worst case if the pivot element in the last position of an array $O(n^2)$	Average case if the pivot element in the midle/random position of an array.

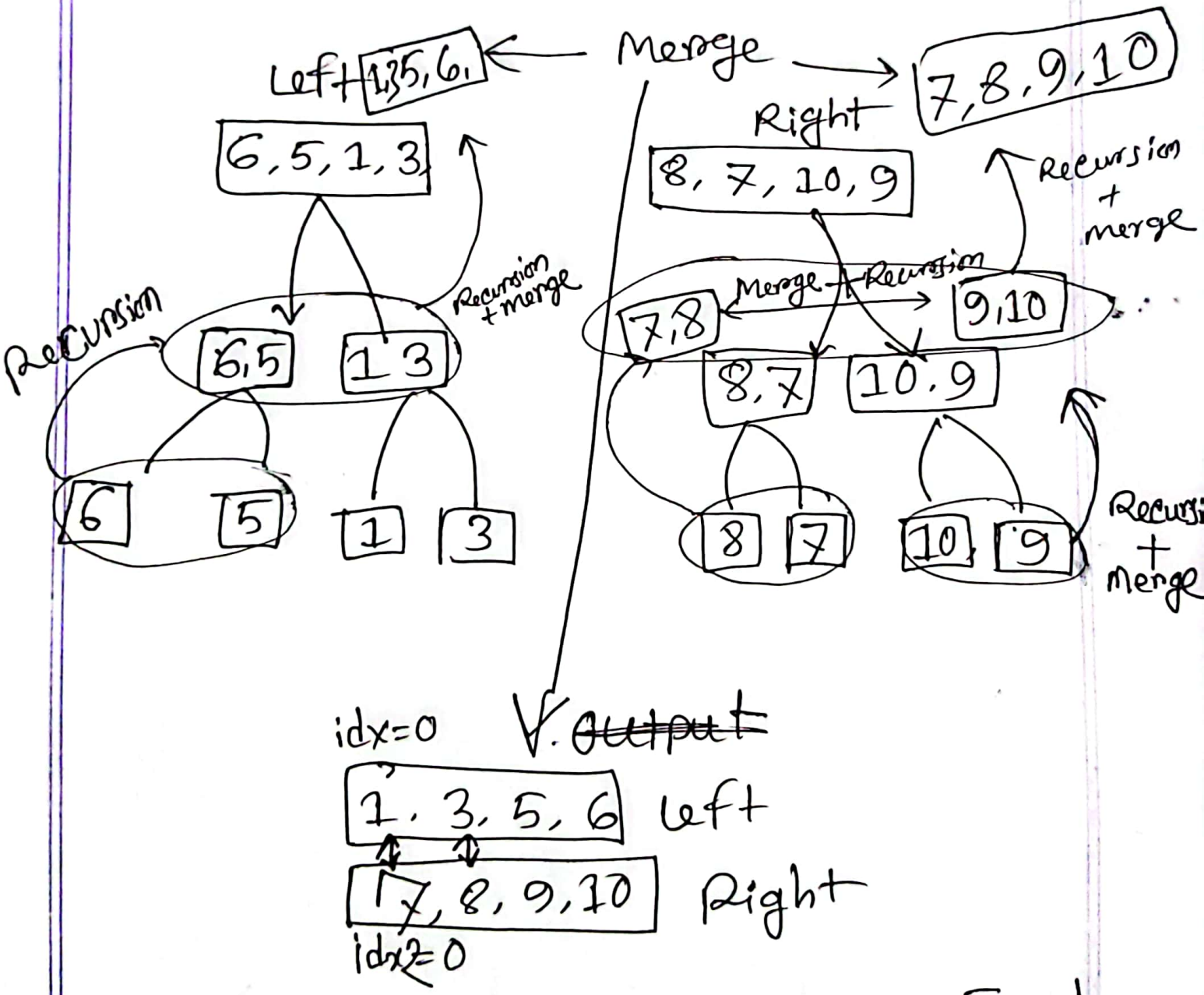




$\left(\frac{n}{2}\right)$ level :
elements
$= n + \frac{n}{2} + \frac{n}{4} + \frac{n}{8} + \frac{n}{16} \ldots$
$= (\log n)$ Level.

Answer - 7

[6, 5, 1, 3, 8, 7, 10, 9]



idx=0

~~Output~~

1, 3, 5, 6 Left

7, 8, 9, 10 Right

idx2=0

1, 3, 5, 6, 7, 8, 9, 10 Final Output