TIME AND SPACE COMPLEXITY

Time and Space Complexity are one of the most basic and important concepts of DSA.

* What is Time Complexity
* What is space complexity
* Their importance
* Asymptotic notations
* Short cuts to find time complexity
* Hierarchical order

Questions

1. Linear Search – BEST TIME COMPLEXITY – O(n)
2. Linear Search – WORST TIME COMPLEXITY – O(n)
3. Linear Search – AVG TIME COMPLEXITY – O(n)
4. Binary Search – BEST TIME COMPLEXITY – O(1)
5. Linear Search – WORST TIME COMPLEXITY – O(log n)
6. Linear Search – AVG TIME COMPLEXITY – O(log n)
7. Linear Search – BEST TIME COMPLEXITY – O(n)
8. Insertion Sort– BEST TIME COMPLEXITY – O(n)
9. Insertion Sort– Worst TIME COMPLEXITY – O(n^2)
10. Insertion Sort– AVG TIME COMPLEXITY – O(n^2)
11. Quick Sort– BEST TIME COMPLEXITY – O(n log n)
12. Quick Sort– WORST TIME COMPLEXITY – O(n^2)
13. Quick Sort– AVG TIME COMPLEXITY – O(n log n)
14. Merge Sort– BEST TIME COMPLEXITY – O(n log n)
15. Merge Sort– Worst TIME COMPLEXITY – O(n log n)
16. Merge Sort– AVG TIME COMPLEXITY – O(n log n)
17. Bubble Sort– BEST TIME COMPLEXITY – O(n)
18. Bubble Sort– Worst TIME COMPLEXITY – O(n^2
19. Bubble Sort– Avg TIME COMPLEXITY – O(n^2)

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