

Linear Search and Binary Search:

1. Asymptotic average case time complexity of linear search algo is_____.

- A. $O(n)$
- B. $O(n/2)$
- C. Both A & B
- D. None of the above

Answer: A

2. Linear Search is also called as _____.

- A. Quadratic Search
- B. Sequential Search
- C. Random Search
- D. Periodic Search

Answer: B

3. In Linear Search after every iteration search space is reduced by _____.

- A. $(n/2)$
- B. $(n-1)$
- C. $(n-2)$
- D. None of the above

Answer: B

4. In Binary Search after every iteration search space is reduced by_____.

- A. $(n/2)$
- B. $(n-1)$
- C. $(n-2)$
- D. None of the above

Answer: A

5.
Binary Search is also called as _____.

- A. Logarithmic Search
- B. Half-interval Search
- C. Both A & B
- D. None of the above

Answer: C

6.
Which of the following problem solving technique used in binary search _____.

- A. Greedy Approach
- B. Simple Approach
- C. Divide and Conquer Approach
- D. Divide and Rule Approach

Answer: C

7.
Average case time complexity of Binary Search is _____.

- A. $O(n/2)$
- B. $O(n-1)$
- C. $O(\log n)$
- D. $O(n^2)$

Answer: C



Sorting Algorithms

8.

In which of the following sorting algorithm magnitude of time complexity is same in _____ all possible cases.

- A. Quick Sort
- B. Selection Sort
- C. Insertion Sort
- D. Bubble Sort

Answer: B

9.

Which of the following sorting algorithm is not inplace.

- A. Selection Sort
- B. Bubble Sort
- C. Quick Sort
- D. Merge Sort

Answer: D

10.

Which of the following is an efficient sorting algorithm for smaller input array.

- A. Insertion Sort
- B. Quick Sort
- C. Bubble Sort
- D. Merge Sort

Answer: A

11.

Which of the following is an efficient sorting algorithm for larger input array.



- A. Insertion Sort
- B. Quick Sort
- C. Bubble Sort
- D. Merge Sort

Answer: B

12.

What is the worst case time complexity of a Quick Sort.

- A. $O(n \log n)$
- B. $O(n^2)$
- C. $O(n)$
- D. None of the above

Answer: B

13.

Which of the following sorting algorithm do not follows divide-and-conquer strategy.

- A. Quick Sort
- B. Merge Sort
- C. Insertion Sort
- D. None of the above

Answer: C

14.

Which of the following sorting algorithm is also called as "Sinking Sort".

- A. Quick Sort
- B. Selection Sort
- C. Insertion Sort
- D. Bubble Sort

Answer: D



15.

In which of the following sorting algorithm elements which are at two consecutive positions gets compared for sorting.

- A. Quick Sort
- B. Selection Sort
- C. Bubble Sort
- D. Selection Sort

Answer: C

16.

Best case time complexity of merge sort algorithm is _____.

- A. $O(\log n)$
- B. $O(n \log n)$
- C. $O(n^2)$
- D. None of the above

Answer: B

17.

Which of the following sorting algorithm is an adaptive.

- A. Selection Sort
- B. Insertion Sort
- C. Bubble Sort
- D. All of the above

Answer: B