4 Lecture - CS502

Important Mcqs

- 1. Which of the following is not a sorting algorithm?
 - a) Merge sort
 - b) Bubble sort
 - c) Hash sort
 - d) Quick sort

Solution: c) Hash sort

Which sorting algorithm has the worst-case time complexity of O(n^2)?

- a) Quick sort
- b) Merge sort
- c) Bubble sort
- d) Radix sort

Solution: c) Bubble sort

Which of the following sorting algorithms is a stable sort?

- a) Heap sort
- b) Insertion sort
- c) Quick sort
- d) Selection sort

Solution: b) Insertion sort

Which sorting algorithm is used by the C++ STL sort() function?

- a) Quick sort
- b) Merge sort
- c) Heap sort
- d) Bubble sort

Solution: a) Quick sort

Which sorting algorithm is often used for sorting linked lists?

- a) Quick sort
- b) Merge sort
- c) Bubble sort
- d) Selection sort

Solution: b) Merge sort

Which of the following sorting algorithms has a worst-case time complexity of O(n log n)?

- a) Quick sort
- b) Bubble sort
- c) Insertion sort
- d) Selection sort

Solution: a) Quick sort

Which sorting algorithm works by repeatedly finding the minimum element from the

unsorted part of the array and putting it at the beginning?

- a) Merge sort
- b) Quick sort
- c) Selection sort
- d) Bubble sort

Solution: c) Selection sort

Which of the following is a disadvantage of using quick sort?

- a) Worst-case time complexity is O(n^2)
- b) It is not a comparison-based sorting algorithm
- c) It requires extra space for the temporary array
- d) It is not an in-place sorting algorithm

Solution: a) Worst-case time complexity is O(n^2)

Which sorting algorithm can be used for sorting strings in lexicographic order?

- a) Bubble sort
- b) Quick sort
- c) Insertion sort
- d) Radix sort

Solution: d) Radix sort

Which sorting algorithm is based on the divide-and-conquer strategy?

- a) Bubble sort
- b) Selection sort
- c) Merge sort
- d) Quick sort

Solution: c) Merge sort