Started on	Friday, 28 June 2024, 6:40 PM
State	Finished
Completed on	Friday, 28 June 2024, 6:50 PM
Time taken	10 mins 21 secs
Marks	9/10
Grade	**10** out of 11 (**90**%)

Question 1

Complete

Mark 1 out of 1

A characteristic of the data that binary search uses but the linear search ignores is the_____.

- a. Order of the elements of the list.
- b. Length of the list.
- c. Maximum value in list.
- d. Type of elements of the list.

Question 2

Complete

Mark 1 out of 1

In a double-ended queue (deque), where can elements be added and removed?

- a. Only at the front
- b. Only at the rear
- c. At both the front and rear
- d. In the middle

Question 3

Complete

Mark 1 out of 1

In a linear search algorithm, worst case occur.

- a. If the key element is exist at first position in the list.
- b. If the key element is exist at last position in the list.
- c. If the key element does not exist in the list.
- d. If the key element either exists at last position or does not exist in the list.

Question 4

Complete

Mark 0 out of 1

In a singly linked list, if you have a pointer to a node, how can you delete that node from the list efficiently?

- a. Update the pointer to point to the next node and then free the memory
- b. Traverse the entire list to find the previous node and update its next pointer
- c. Maintain an additional pointer to the previous node while traversing the list
- d. Reverse the list and then delete the node

Question 5

Complete

Mark 1 out of 1

In Which sorting algorithm elements which are at two consecutive positions get compared.

- a. Selection Sort
- b. Bubble Sort
- c. Insertion Sort
- d. None Of These

Question 6

Complete

Mark 1 out of 1

We can efficiently reverse a string using a

- a. linear queue
- b. circular queue
- c. stack
- d. doubly linked list

Question 7

Complete

Mark 1 out of 1

What is an advantage of the heap over a stack.

- a. The heap is more flexible than the stack.
- b. Memory space for the heap can be dynamically allocated and de-allocated as needed.
- c. The memory of the heap can at times be slower when compared to that stack.
- d. A and B.

Question 8

Complete

Mark 1 out of 1

What is the best time complexity of bubble sort?

a. O[No]^2
b. O[No] log n
c. O[No]
d. O[No] (Log n)^2

Question 9

Complete

Mark 1 out of 1

Which of the following statement is false about singly linear linked list?

a. In a SLLL, traversal can be done only in a forward direction.
b. In a SLLL, add and delete node at last position operations takes O[No] time.
c. In SLLL, add and delete node at first position operations takes O(1) time.
d. In SLLL, previous node of any node can be accessed from it.

Question 10

Complete

Mark 1 out of 1

You have to sort a list L consisting of a sorted list followed by a few "random" elements. Which of the following sorting methods would be especially suitable for such a task?

a. Bubble sort
b. Selection sort
c. Quick sort
d. Insertion sort