Review Test 11-Algorithm and Data Structures

Max:Marks-10
Time: 10 min

Draft saved

*Required

Email *

How many passes are required for sorting 8 elements list using bubble sort? 1 point

- 0
- 7
- 8
- 9

Clear selection

Consider the following array and what is the status of the array after the fourth pass when we use the bubble sort? 2 points

Array Elements: 20, 16, 12, 8, 4, 1

- ○ 16, 12, 8, 4, 1, 20
- ○ 12, 8, 4, 1, 16, 20
- ○ 8, 4, 1, 12, 16, 20
- ◉ 4, 1, 8, 12, 16, 20

Clear selection

Name *

PRN *

Consider the following array and what is the status of the array after the fifth pass when we use the insertion sort? * 1 point

Input: 4 3 2 10 12 1 5 6

Output: 1 2 3 4 5 6 10 12

After the first pass: 3 4 2 10 12 1 5 6

- ○ 3 4 2 10 12 1 5 6
- ○ 2 3 4 10 12 1 5 6
- ○ 1 2 3 4 5 10 12 6
- ◉ 1 2 3 4 10 12 5 6

What will be the output list after completing first pass of bubble sort on input array 32, 51, 27, 85, 66, 23, 13, 57? 1 point

- ○ 23, 13, 27, 33, 51, 57, 66, 85
- ○ 32, 51, 27, 66, 23, 13, 57, 85
- ◉ 32, 27, 51, 66, 23, 13, 57, 85
- ○ 27, 33, 51, 23, 13, 57, 66, 85

Clear selection

considering n elements are to be sorted using bubble sort : * 1 point

comparisons required => 1 + 2 + 3 + ... + (n-1) => n(n-1)/2 => O(n2)

What is the worst case time Complexity

- O(n)
- O(n2)
- O(2n)
- O(n^2)

Consider the following array and what is the status of the array after the second pass when we use the selection sort? Input: 64 25 12 22 11 Output: 11 12 22 25 64 After the first pass: 11 25 12 22 64 1 point

- 64 11 12 22 25
- 11 12 25 22 64
- 11 12 22 25 64
- 64 25 12 11 22

Clear selection

In selection statement which of the following is correct 1 point

- (●) The list is considered to be divided into two lists, where the left list contains the unsorted elements, and the right list contains the sorted elements.
- ( ) The list is considered to be divided into three lists, where the left list contains the unsorted elements, the right list contains the sorted elements and the mid portion contains the key value which needs to be compared.
- ( ) The list is not divided, but an extra array is required to store elements.
- ( ) The list is considered to be divided into two lists, where the left list contains the sorted elements, and the right list contains the unsorted elements

Clear selection

In which Sorting Methode ,The array is virtually split into a sorted and an unsorted part. Values from the unsorted part are picked and placed at the correct position in the sorted part. 1 point

- ( ) Binary sort
- ( ) Bubble sort
- (●) Insertion sort
- ( ) Selection Sort

Clear selection

In.....sorting algorithm that compares two adjacent elements and swaps them until they are in the intended order. * 1 point

- ○ Binary sort
- ◉ Bubble sort
- ○ Insertion sort
- ○ Selection Sort

Submit Clear form