

Question 1

Correct

Mark 1.00 out of 1.00

Flag question

Rearrange the below algorithm for Bubble Sort.

Input: A is the list of elements and n is the size of the list

Output: A1, A2,...,An, arranged in increasing order

✓ procedure bubbleSort(A,n)

✓ for i = 0 to n-1

✓ for j = 0 to n-i-1

✓ if A[j] > A[j+1]

✓ swap a[j] <-> A[j+1]

✓ end bubbleSort

Question 2

Correct

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You have to sort a list 'L' which consists of some sorted elements and few "random" elements. Which of the following sorting methods would be especially suitable for such a task?

Select one:

- ☐ Selection sort
- ☐ Quick sort
- ☐ Bubble sort
- ☒ Insertion sort ✓

Question 2

Correct

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Time complexities of three algorithms are given. Which should execute the slowest for large values of N?

Select one:

- ☒ $O(n^2)$ ✓
- ☐ $O(N)$
- ☐ $O(\log N)$
- ☐ $O(2N)$

Question 4

Correct

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What is the time complexity for executing merge sort on an array of size n which is already sorted is

Select one:

- ☐ $O(\log n)$
- ☐ $O(n^2)$
- ☐ $O(n)$
- ☒ $O(n \log n)$ ✓

Question 5

Correct

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If the given array is {6,2, 5, 1, 9 }, the 3rd number from the left while doing bubble sort in the 2nd iteration is

5 ✓ .