20SCS2050 - Quiz 12(5 Points)

1.Consider [[1, 10, 20] [5]], how many comparisons will insertion sort do to move 5 to its right location? (consider ascending order)

(1 Point)

1

2

3

4

2.Complexity of insertion sort to put [10, 20, 25, 30, 55] in ascending order?

(1 Point)

O(1)

O(n)

O(n^2)

O(2^n)

3.Complexity of selection sort to put [10, 20, 25, 30, 55] in ascending order?

(1 Point)

O(1)

O(n)

O(n^2)

O(2^n)

4.What can you say about the overall performance of selection and insertion sort to have [5, 2, 8, 1, 0] in ascending order: ?

(1 Point)

The performance of the 2 algorithms will be exactly the same

The performance of selection sort will be better than insertion sort's performance

The performance of selection sort will be worse than insertion sort's performance

The performance of the 2 algorithms will vary, sometimes selection will be better, sometimes insertion will be better

5.What can you say about the overall performance of selection and insertion sort to have [8, 5, 2, 1, 0] in ascending order?

(1 Point)

The performance of the 2 algorithms will be exactly the same

The performance of selection sort will be better than insertion sort's performance

The performance of selection sort will be worse than insertion sort's performance

The performance of the 2 algorithms will vary, sometimes selection will be better, sometimes insertion will be better