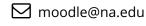
http://www.na.edu















Dashboard > My courses > COMP > COMP 5327.Advanced Algorithms.2019SPR.s1 > 11 February - 17 February > Quiz 4

Started on	Sunday, 17 February 2019, 8:32 PM
State	Finished
Completed on	Sunday, 17 February 2019, 8:45 PM
Time taken	13 mins 11 secs
C l .	0.00 - 4 - 540.00 (00%)

Question 1

Correct

Mark 1.00 out of 1.00

What is the complexity of Binary Search?

Select one:

- a. O(log (log N))
- b. O(log N)
- c. O(N)
- d. O(N*N)

Your answer is correct.

The correct answer is: O(log N)

Question 2

Correct

Mark 1.00 out of 1.00

Which one is not an O(N log N) algorithm?

Select one:

- a. Merge Sort
- b. Selection Sort
- c. Heap Sort
- d. Quick Sort

Your answer is correct.

The correct answer is: Selection Sort

Question 3

Partially correct

Mark 1.00 out of 2.00

Which of the following algorithms are examples of decrease by a constant factor approach?

Select one or more:

- a. All of the options
- b. None of the options
- c. Interpolation Search
- d. Exponentiation by squaring
- e. Euclid's algorithm for computing GCD
- f. Binary Search

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: Binary Search, Exponentiation by squaring

Question 4

Correct

Mark 1.00 out of 1.00

What is the complexity of Interpolation Search?

Select one:

- a. O(log N)
- b. O(log (log N))
- c. O(N)
- d. O(N*N)

Your answer is correct.

The correct answer is: O(log (log N))

Question 5

Correct

Mark 1.00 out of 1.00

Which one is not an O(N²) algorithm?

Select one:

- a. Insertion Sort
- b. Bubble Sort
- c. Merge Sort
- d. Selection Sort

Your answer is correct.

The correct answer is: Merge Sort

Question 6

Incorrect

Mark 0.00 out of 1.00

Insertion sort falls under which variations of the decrease and conquer approach?

Select one:

- 🏿 🛮 a. Variable size decrease 🗶
- b. None of the options
- c. Decrease by a constant
- d. Decrease by a constant factor

Your answer is incorrect.

The correct answer is: Decrease by a constant

Question 7

Correct

Mark 2.00 out of 2.00

Which of the following algorithms can be designed using variable-size-decrease variation of the decrease and conquer approach to problem solving?

Select one or more:

- a. Interpolation search
- b. Euclid's algorithm for computing GCD
- c. Binary Search X
- d. None of the options
- e. Insertion Sort 💢

Your answer is correct.

The correct answers are: Euclid's algorithm for computing GCD, Interpolation search

Question 8 Correct Mark 1.00 out of 1.00

Which of the following is NOT true about the decrease and conquer approach?

Select one:

- a. Decrease by one technique is natural approach for developing algorithms for generating elementary combinatorial objects.
- b. None of the options
- c. Decrease by a constant, Decrease by a constant factor, and Variable size decrease are three major variations of the approach
- d. Also known as incremental approach
- e. All of the options

Your answer is correct.

The correct answer is: None of the options

◆ Discussion 3



Chapter 6 ▶