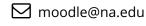
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Dashboard > My courses > COMP > COMP 5327.Advanced Algorithms.2019SPR.s1 > 28 January - 3 February > Quiz 2

Started on	Sunday, 3 February 2019, 9:53 PM
State	Finished
Completed on	Sunday, 3 February 2019, 10:22 PM
Time taken	29 mins 2 secs
Grade	<b>6.00</b> out of 10.00 ( <b>60</b> %)

Grade 6.00 out of 10.00 (60%)

Question 1 Correct Mark 1.00 out of 1.00

Which one of the following is not naturally recursive?

## Select one:

- a. Tower of Hanoi
- b. Sum of N numbers
- c. Factorial
- d. Fibonacci

Your answer is correct.

The correct answer is: Sum of N numbers

Question 2

Correct

Mark 1.00 out of 1.00

What is the complexity of the following algorithm?

```
for ( int i=0; i<n; i++){
    Printsum(i);
}</pre>
```

## Select one:

- a. O(1)
- b. Depends on Printsum() function
- c. O(N)
- d.  $O(N^2)$

Your answer is correct.

The correct answer is: Depends on Printsum() function

**Question 3** Correct Mark 1.00 out of 1.00

Two main measures for the efficiency of an algorithm are:

Select one:

- a. Time and space
- b. Processor and memory
- c. Data and space
- d. Complexity and capacity

Your answer is correct.

The correct answer is: Time and space



Question 4 Cor

Correct Mark 1.00 out of 1.00

Recursion is not always the best solution.

Select one:

- True
- False

The correct answer is 'True'.

Question 5

Correct

Mark 1.00 out of 1.00

When you compare the complexities of the following algorithms, which one would be the slowest running?

Select one:

- a. O(1)
- b. O(2<sup>N</sup>) √
- c. O(N log N)
- d. O(2)

Your answer is correct.

The correct answer is:  $O(2^{N})$ 

Question 6

Correct

Mark 1.00 out of 1.00

When we investigate algorithms what should we look for?

Select one:

- a. Its speed
- b. Its behavior
- c. All of them
- d. Its memory requirements

Your answer is correct.

The correct answer is: All of them

Question 7

Incorrect

Mark 0.00 out of 2.00

Which of the following statements is NOT true about the order of growth of functions?

Select one:

- a. All polynomials of the same degree belong to the same class
- b. All logarithmic functions belong to the same class irrespective of the logarithm's base
- c. All the options
- d. None of the options
- e. Order log n <  $a^n$  < n! <  $n^n$
- f. Exponential functions a have different orders of growth for different a's



Your answer is incorrect.

The correct answer is: None of the options

## **Question 8**

Incorrect

Mark 0.00 out of 2.00

What is the running time of the following code fragment?

## Select one:

- a. O(N)
- b. O(N<sup>2</sup>) ★
- c. O(N log N)
- d. O(log N)
- e. O(N<sup>3</sup>)

Your answer is incorrect.

The correct answer is: O(N)

**◀** Discussion 2

Jump to...

Chapter 4 ▶