

Homework 1 - Debugging/Time Complexity/Reading from a file.

Due 8:00 AM Wed 5/16/2018

Part 1: Debugging (33 pts)

Q1: When running a debugger in an IDE, what is the difference between step over and step into?

Step over will run a function and return the output/values of the variables inside a function, but will not “step into” the function where it would return the output/values by going through each line of code.

Q2: Describe how to run the debugger in your favorite IDE.

In Eclipse the debugger is in the toolbar at the top with a green bug icon. You can toggle break points in the column to the left of the numbered lines of code. To stop debugging there is a red square also in the toolbar at the top that will terminate the debugging mode.

Q3: Describe when you would use a debugger and when the debugger may not show you a bug in your code.

The debugger is useful to keep track of changing variables or when something isn't printing correctly or to show if a function wasn't implemented correctly. The debugger might not show you a bug in your code if a certain function or formula was written incorrectly, but still runs with no errors. Another situation could be if you step over a function thinking it is correct, instead of stepping into the function and seeing in what way the variables actually change line by line.

Part 2: Time Complexity (33 pts)

Quiz: Comparing function growth



A green star icon inside a circle, with four smaller green dots below it, indicating 100% completion.

You got 100%

Amazing Job!
You got 4 out of 4 correct.

You got **120 energy points**

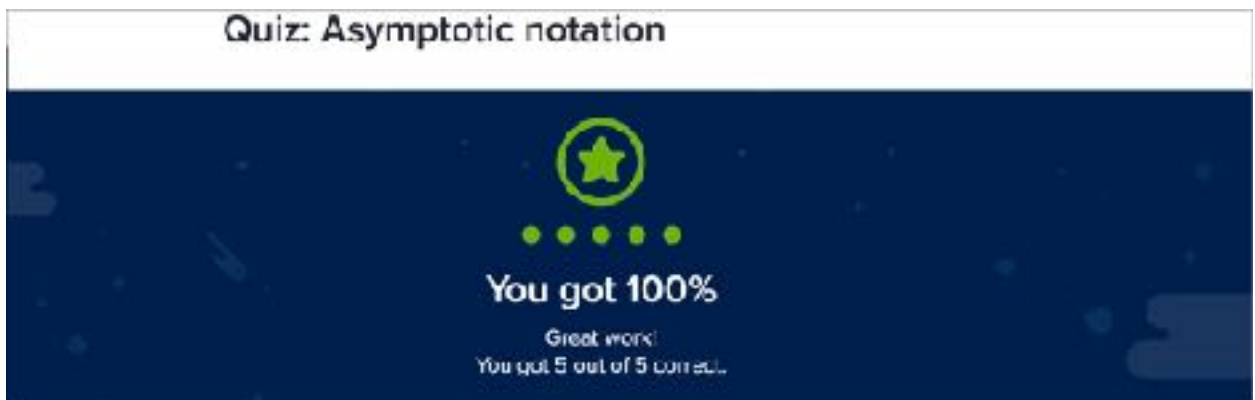
Points for questions +20

4 problems answered 100% correctly

Points for completion +100

Bonus points earned for completing this task

Quiz: Asymptotic notation



A green star icon inside a circle, with four smaller green dots below it, indicating 100% completion.

You got 100%

Great work!
You got 5 out of 5 correct.

You got **125 energy points**

Points for questions +25

5 problems answered 100% correctly

Points for completion +100

Bonus points earned for completing this task

[Practice again](#)

[Next article](#)