

Lab 5 Questions

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[Question 1 (4 pts)] In your own words, explain the process of TDD.

In TDD, the programmer begins by writing a test case that they expect to fail. They then add code to the method that is being tested so that that test will pass. This process continues until the program is fully functional and free of errors.

[Question 2 (6 pts)] TDD proponents claim that it benefits software development. The advantages that are often associated with TDD are that (a) it increases the confidence software developers have in their code, and (b) it improves overall code quality. Do you agree with these claims? Justify your answer.

We agree with these claims. Testing functionality as the program is developed ensures that it will work as intended under all circumstances, increasing confidence in the code. TDD also helps the programmer to avoid including unnecessary code, making the code more concise and of better quality.

[Question 3 (5 pts)] Based on your experience with this lab, please specify advantages and disadvantages of TDD.

Advantages:

- TDD gives a higher sense of accomplishment because tests are passed at a high rate
- TDD checks code functionality from the lowest level to the highest level

Disadvantages:

- TDD can be more time-consuming than other development methods
- TDD can cause the programmers to get hung up on very specific cases/details