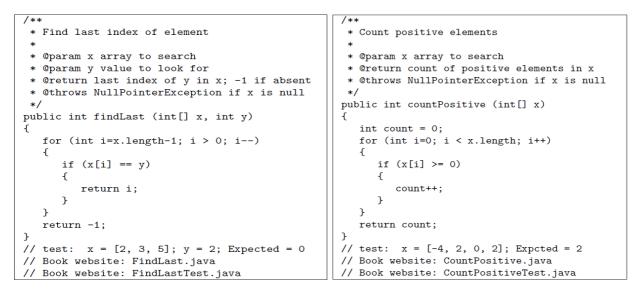
HW#1: Faults, Errors, and Failures

Below are two faulty programs. Each includes a test case that results in failure. Answer the following questions about each program.



(a) Identify the fault.

(b) If possible, identify a test case that does **not** execute the fault.

(c) If possible, identify a test case that executes the fault, but does **not** result in an error state.

(d) If possible identify a test case that results in an error, but **not** a failure. Hint: Don't forget about the program counter.

(e) For the given test case, identify the first error state. Be sure to describe the complete state.

(f) Fix the fault and verify that the given test now produces the expected output.

Submission Guidelines

- Assignment is individual. No group work is accepted.
- Only PDF format is accepted.