Larry Arndt

CS-405

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Testing

In this activity we do a variety of tests with the Google testing application for C++. The tests are of the standard format using asserts. Usually we assert if something is true or if it is equal to a value. We also might want to know if a process changes a value in the system, or if one value is more than another value. Other times we want to know if something throws an exception.

There are positive tests and negative tests. The positive tests pass when a situation is correct or true for a good outcome you would want in your system, like the data is correct, bounds are not violated, a process does not do something it should not. A negative test is to test that something makes something go wrong and fail or throw an exception. Both of these types of tests work together to prevent bugs in our programs.

The always fail test is left on in this program .. I did not turn it off; other than that all test pass. The tests meet the specification requirements requested. My custom tests do comparisons on specific array addresses with at(), and check for an exception thrown with an assignment made with resize.

