**Error Guessing**

*Common errors based on tester’s experience:*

Syntax errors (i.e., missing semicolon, typos, unequal number of open + closed braces)

Missing check for inappropriate user input (i.e., negative values, wrong data types)

Infinite loops (loop termination conditions never met)

Wrong calculation (division error, wrong parameter)

Wrong I/O specifications

Array index out of bounds

**Random Testing**

Create three test inputs. For each test pick a list of 5-7 random integers and enter them one by one when prompted.

T1: -6, 2, -5, -11, 0

T2: 0, -4, 81, 17, 211182, -239857

T3: 2, 9249, 127, 1639, 25404, 2598, 155

The program does not compile, but even if it did the program would keep asking for input forever regardless of the length of the input. Even if the infinite loop was fixed, the negative values would result in an erroneous calculation.

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case | Input Values | Expected Output | Actual Output |
| 0 | - | Possibly flawed calculation of dollars and cents | Doesn’t compile |

Before we conduct equivalence test partitioning, we should try to fix compilation errors plaguing our code using insight gained by our error guessing and random testing.