CS 31 Project 1 Report

Melody Chen #705120273

The inputs I provided for step 5 that caused the program to produce incorrect result were negative numbers. This caused the program to output “nan%”(Not a Number) for republicans, democrats and independents, and ultimately caused the program to output a nonsensical result of the control of congress going to Democrats.

The error I introduced to produce a logic error was to make “int total = republicanSeats – democraticSeats – independentSeats;”, so the total seats would be incorrect. Because this is not a compile error, the program could still compile and run. But, because the value of the variable total is incorrect, some of the percent seats held by certain parties exceeded 100%, which does not make sense. The final result of which party held control of the senate depended on the percent values, therefore the final result also doesn’t make sense.

The two errors I introduced to produce compile errors were a missing semicolon and the reference of a nonexistent variable. As expected, the compiler reported two errors: “Expected ‘;’ at end of declaration” and “Use of undeclared identifier”.