­­Project 1 Report

In step 5, I introduced illogical integers by inputting “-1” as my value for democrats, “4” as my value for republicans, and “2” as my value for independents. I was returned with an 80% republican partition, -20% democrat, and 40% independent. This error is due to the fact that by inputting all of these, the math adds them up to a total of 5. Then, it takes each integer variable and divides it by “total” 5, so the values are 100x(-1/5) for democrats, 100x(4/5) for republicans, and 100x(2/5) for independents. At least the math itself is fine.

In logic\_error.cpp I introduced an error that could have been made in an everyday situation. All I did was “forget” a zero when defining the pctRep value, making the line:

double pctRep = 10.0 \* republicanSeats / total;

This simply creates an error with the final calculation, at least in terms of numbers being correct. By reducing the pctRep value by a factor of 10, it creates an error in logic by messing the math up. The final math no longer works out because the final if function is done by comparing pctRep with pctDem, and by messing up the pctRep value we mess up that comparison.

In compile\_error.cpp I created two new errors that cause building of the code to fail entirely. Both are realistic errors. First, I removed a semicolon from the end of line 22. This gives me error C2144 in line 23, claiming that a semicolon is expected to precede the identifying function “double”. My second error was that I “misspelled” the double value pctRep as pctrep in the cout function. This creates another compile error as pctrep is not a defined variable, or an ‘undeclared identifier”. This gives me error C2065 in line 29, where this variable is called on.