CS 31 Project 1

The input in step 5 that I provided in order to cause a nonsensical output was entering 1000, 1000, and 1. This gave the program a sample size of 1000 people, 1000 of which voted for Hillary Clinton and 1 individual that voted for Donald Trump. The result that occurred was 100.0% of individuals voting for Hillary Clinton and 0.1% of individuals voting for Trump. This is nonsensical because that totals 100.1% rather than 100.0%.

In the logic\_error.cpp file, one 0 was deleted from 100.0 in the line that stated:

double pctHillary = 100.0 \* forHillary / numberSurveyed;

This was a simple typo that could be made that would, rather than computing the percentage of the voters, gave a tenth of the value that we were trying to find because the program would multiply by 10 instead of 100.

In the compile\_error.cpp file, there were two errors introduced that could cause the program to not compile. The first error was introduced in the line:

int forDonald;

Instead of the variable being defined as forDonald, an o was deleted that named it forDnald instead. This causes a variable to be defined and not used later which is not the source of the compilation error. However, the use of the variable forDonald later in the program produces the error as the variable has not been previously defined and thus cannot be used.

The second error was introduced in line:

cout << "How many registered voters were surveyed? ";

In this line, the semicolon was removed. This error would cause the line not to terminate and thus the functions do not operate as intended and cause a compilation error. When trying to “Start Without Debugging,” the error message that pops up states that there are build errors and asks whether we wish to fix them. On the bottom of the screen, the errors are listed as “expected a ;,” “identifier “forDonald” is undefined,” “syntax error missing ‘;’ before identifier cin,” and “’forDonald’: undeclared identifier.”