**CS Project 1 Report**

**Step 5:**

Incorrect output:

**Input:**

How many students were surveyed? 100

How many of them prefer the quarter system? 50

How many of them prefer the semester system? 50

**Output:**

50.0% prefer the quarter system.

50.0% prefer the semester system.

More students prefer the semester system to the quarter system.

Program ended with exit code: 0

The output is incorrect as the number of students who prefer the semester system is *equal to* the number of students who prefer the quarter system.

Nonsensical output:

**Input:**

How many students were surveyed? 10

How many of them prefer the quarter system? 12

How many of them prefer the semester system? 13

**Output:**

120.0% prefer the quarter system.

130.0% prefer the semester system.

More students prefer the semester system to the quarter system.

Program ended with exit code: 0

The output is nonsensical as we cannot have more than 100.0 % for either of the preferences. This occurs because the number of students preferring quarter and semester systems that was inputted was greater than the number of student surveyed.

**Step 6:** In logic\_error.cpp, in line 30, I changed “if (preferQuarter > preferSemester)” to “if (preferQuarter < preferSemester)” thereby reversing the logic of the if statement and inducing a logical error.

**Step 7:**

Error 1: I changed int main() to double main() which induced a compile error prompting the message “'main' must return 'int'”

Error 2: I removed the semicolon at the end of line 9 “int numberSurveyed;” which prompted the error “Expected ';' at end of declaration”

Both errors individually (and together) caused the build to fail.