In step 5, I inputted 100 for int numberSurveyed, 100 for int preferQuarter, and 100 for int preferSemester. This would give a nonsensical input of both 100% prefer the quarter system, and 100% prefer the semester system. This would also print “More students prefer the semester system to the quarter system.”, even if the number of student prefer the quarter system as the number of students who prefer the semester system.

In logic\_error.cpp, I introduced the errors in lines 20 and 21, in which I change the 100.0 to a 100, which would truncate integer division to give an integer, and replaced the “\*” with a “+”, which would result in addition instead of multiplication. This would all result in a successful run, but with non-sensical output. The truncation of integer division would result in as well as the swap of between multiplication and addition would result in “100 + 0” for both of these lines if we assume that user always inputs sensical numbers.

In compile\_error.cpp, I introduced the errors in lines 9, 11, and 13. In line 9, I removed a semicolon, which would result in the variable int preferQuater to be uninitialized. This gave the error message “expected a ‘;’” in line 10 and “identifier “preferQuarter” is undefined” in line 16, which refers to the fact that line 9 is missing a ‘;’ to end the argument, which causes line 10 to be unable to initialize the variable “preferQuarter”. In line 11, I changed the variable type from int to string. This results in the error message “no operator “/” matches these operands”, because we cannot divide a string by an integer. In line 13, I changed the operator after cout from “<<” to “>>”, which is the operator for cin, which results in the error message “no operator “>>” matches these operands”, because cout does not use the “>>” operator.