Project 1 Report:

In step 5, when asked to input integers that cause the program to produce incorrect, unusual or nonsensical output, I input the integer 5 for the number of UK citizens surveyed, the integer 10 for the amount surveyed that want to remain in the EU, and -3 for the amount who want to leave. Although all three of these numbers are integers, these integers don’t make sense in the context of the questions. If only 5 people are surveyed, it is impossible for 10 people to say they want to remain in the EU, and it makes no logical sense for a negative number of people when asked how many people want to leave in the EU. Although this runs and produces the results of 200% remainers and -60% leavers, the numbers returned are nonsensical.

For step 6, in creating logic errors for the code, I changed the equations 100\* (numberOfRemainers/numberSurveyed) and 100\* (numberOfLeavers/numberSurveyed) to 100 + (numberOfRemainers/numberSurveyed) and 100\* (numberSurveyed/numberOfLeavers) respectively. These produce logic errors due to the fact that you are supposed to multiply the proportion by 100 (not add) in order to get the percentages, and you have to have the proportion of people who answered a certain way (leavers) divided by the total instead of the other way around. Thus, when running the code with 10 total interviewees, 4 people who were for remaining, and 6 people who were for leaving, the result is 100% in favour of remaining and 166.7% in favour of leaving, two nonsensical numbers.

Finally, in step 7, I produced three different compile errors. The first of these occurred at the beginning, when I didn’t code the #include <iostream>. This makes it so that the compiler cannot understand the cout and cin methods, because it doesn’t have access to the database which tells it the meanings of these methods. My next compile error was extremely simple, as I just didn’t include a semicolon at the end of the line where I defined the pctRemainers double. Finally, I didn’t include the close bracket at the end of the main method, which results in an error because the code isn’t complete and closed.