Project 1 Report

**Step 5:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | How many electoral college votes did you receive? | How many electoral college votes did your main opponent receive? | How many electoral college votes are needed to win? |
| Trial 1 | 1 | 0 | 100 |
| Output | You received 1.0% of the votes needed to win.  Your main opponent received 0.0% of the votes need to win.  It looks like your main opponent won. | | |

In this test case, even if you received more votes than your main opponent, since the result 1.0 is not greater than 1.00, the program runs the result that your main opponent won, which is incorrect.

|  |  |  |  |
| --- | --- | --- | --- |
| Trial 2 | 20 | 70 | 50 |
| Output | You received 40.0% of the votes needed to win.  Your main opponent received 140.0% of the votes need to win.  It looks like you won. | | |

In this test case, since 40.0 is greater than 1.00, even if your main opponent received more votes than you did and more than votes needed, the program runs the result that you won, which is also incorrect.

|  |  |  |  |
| --- | --- | --- | --- |
| Trial 3 | 50 | 50 | 100 |
| Output | You received 50.0% of the votes needed to win.  Your main opponent received 50.0% of the votes need to win.  It looks like you won. | | |

In this test case, the program still stated that you won, while in fact you and your opponent received the same number of votes.

**Logic Error:**

To calculate pctYou and pctOpponent, I used votesToWin to be devided by votesReceived or opponentVotes. Thus, the more votes you received, the less likely the pctYou will exceed 100 and the less likely for the program to run the result that you won. So this is logically incorrect.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | How many electoral college votes did you receive? | | How many electoral college votes did your main opponent receive? | How many electoral college votes are needed to win? |
| Trial | | 10 | 5 | 6 |
| Output | | You received 60.0% of the votes needed to win.  Your main opponent received 120.0% of the votes need to win.  It looks like your main opponent won. | | |

**Compile error:**

1. Forgot to capitalize “r” when typing votesReceived in line 5. The complier reported that “use of undeclared identifier votesreceived.”
2. Forgot to add “;” after endl. The complier reported that “expected “;” after expression.”