Project report:

In step 5, if I received 0 votes and my main opponent also received 0 votes. Meanwhile the votes needed to win the election has to be 100. However, the result turned out that my opponent can won the election. Next, if I get only 1 vote and my opponent gets 0 vote and the votes needed to win the election is 100, in the end my opponent still wins. Lastly, if I get 2 votes while my opponent gets 10 votes. The votes needed to win is 10. I win this election. Such results are not very reasonable since if I receive fewer votes than my opponent, theoretical I would lose the election.

I think the reason that causes this kind of problem is in the original code. The professor gives us code which says that as long as the ration of the votes received and the votes needed to win is larger than 0.01, I can always win the election.

In order to create the logic error, I changed that as long as the ratio of the number of votes I receive and the number of votes that I needed to win is greater than 0, I can win this election. After running it couple times, I found out that as long as I receive vote in this election, then no matter how many votes my opponent receive and the number of votes needed to win the election, I can always win the election.

In order to create the compile error, I made three mistakes that would cause the code unable to run. First, I deleted one semicolon in the original code. Then when I tried to run the program, the system indicated that there is an expression missing. Also, I deleted the period symbol between “cout” and “precision”. The system showed that there is an undeclared identifier. Lastly, I also one extra blank space between the “<<”, the code also failed to compile.