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Error Report – Project 1

**Step 5**

For step 5 I was able to cause failures with inputted integers in multiple ways. The first was to input very large numbers, greater than the storage capacity of a double (around 15 digits.) A 20 digit input would always cause the program to fail and return both candidates as winning 100% of the vote, an impossibility.

Another way to cause failure with integers was to input the amount of votes for Jerry and Meg to be greater than the amount of voters surveyed. The winner would still be predicted correctly, but the percentages would be nonsensical (Jerry will win 150% of the vote, Meg will win 2000% of the vote, etc.)

**Step 6**

For step 6 I changed the percentage multipliers to a typical typo – instead of “100.0 \* forJerry”, a zero was forgotten and the statement became “10.0 \* forJerry.” The forMeg equation gained a 0 and became “1000.0 \* forMeg.” The program still compiled correctly and everything ran without a problem, except that the numbers given for percentage of the vote were incorrect.

**Step 7**

For step 7 I simply changed many C++ terms so that they had various typos in them, removed semicolons, and generally screwed up the program. It refused to compile because of 4 typos: there were 2 semicolons after “using namespace std”, the identifier “double” was misspelled “doble”, “cout” became “cot”, and “numberSurveyed” was misspelled “numberSureyed.” However, the error reporter gave 8 errors. This indicates a sort of domino effect with compiler errors – one mistake can cause many more in other lines, and fixing very simple misspellings can solve a huge number of supposed bugs in the program.