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Reflection

* Objective:
  + What were you supposed to learn/accomplish?

The purpose of this lab was to give us practice and experience using python and excel. Specifically, if/elif statements, relational and arithmetic operators, and using excel sheets as test cases to test our algorithm.

* Procedure:
  + What steps were followed and what techniques did you use to solve the problem?

Our first step was thoroughly reading the readme file. Secondly, we thought about the problem and what was being asked of us. Third, we used Excel and followed the test cases during the lab. Then, together we created the algorithm for our program. Lastly, we created the program and tested to make sure it matched our test cases.

* + What were the Key concepts explored?

If/elif statements, arithmetic and relational operators, and excel test cases.

* Results:
  + Did your results match what you expected to get?

Yes, our results matched our test cases perfectly.

* + Did you try using various test cases, or extreme test cases?

Yes, we tested different integers for each variable. Including zero, non-zero, and multi-digit integers for each variable.

* Reflection:
  + What challenges did you encounter?

The first evident challenge encountered was creating our test cases in excel. Typing in each number individually was long, tedious, and left a lot of room for human error. Then we learned to type in the code for each box we wanted to represent in the excel equation ($B2 + $C4 for example). Then we learned we could type “$” and then just click the box we wanted to represent in our equation which expedited the process immensely.

* + How did you follow the first 3 rules of programming?

We spent a lot of time thinking after reading the readme file and before/while creating our test cases in excel. We made sure to follow the second rule by making sure our algorithm not only made sense in English but was also translatable to our actual program in python. We took turns with one person reading and the other driving so we could both have practice in each position.

* + Did you overcome them, and how?

Yes, we overcame our challenges by following along with Dr. Z and the lab notes, asking Dr. Z when we had questions, and experimenting through excel ourselves.

* + Any key takeaways?

Writing the algorithm before the program helps me fully understand what the program must do/is going to do before I start coding. Its much easier to solve the problem in English and then translating it to code than it is to immediately go straight to coding.

* + Do you think you learned what you were supposed to learn for this lab?

100%. I learned more about doing the test cases in excel and using the operators in python through this lab than I did in Lab 1

* + What was it like working with your partner?

Hazel was a great partner. Her initiative was very helpful in getting the lab done in a timely manner. She also took a lot of notes from the lecture which helped the both of us when completing the assignment. We worked very well together.