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Reflection

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

We were supposed to calculate the population change over a certain period of time, and practice using an if/else statement to determine whether the population increased or decreased.

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

Steps:

1. Prompt user for the number of seconds between each birth, death, and immigration in a country.
2. Prompt user to input the current population of a country and the number of years in the future they want to know the population.
3. Calculate the number of seconds in a year and store it in a variable.
4. Calculate the expected population in the future and output it as an integer.
   1. Keep results as floats until after the calculations have been performed.

Output whether the population will have increased or decreased.

We started with the algorithm and test cases, then we moved on to the code.

* + What were the Key concepts explored?

Input, output, more complex math equations in python, and if/else statements.

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

The results matched the math done by hand.

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

We used varying and extreme test cases.

* Reflection:
  + What challenges did you encounter?

It was difficult to enter the specific equations and values into Excel to do the test cases.

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

We thought about how to implement our ideas before we started programming. We made the program readable for humans. We practiced to solve the problems we had, and the lab itself was also practice.

* + Did you overcome them, and how?

We overcame the Excel issue by asking for help and clarification during class time and implementing what we learned.

* + Any key takeaways?

Just practice with what we’ve learned and don’t be afraid to consult others to find solutions to problems.

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

I think so.

* + What was it like working with your partner?

It was nice working with Antonio. I feel that I could have been more productive, but Antonio was nice and helpful throughout the lab.