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CS 165_Spring_2019
Module 2
Project 2a Reflection

- **Understanding**:

  I learned more about std::cin and that I could begin an in stream outside of a "for" loop and continue streaming from std::cin within it. I also learned that beginning a loop at "1" rather than "0" is sometimes needed.

- **Testing plan**:

  I failed many of initial tests as I left min and max uninitialized before entering the for loop. I also did not find a solution for the edge case of a user entering a value higher or lower than the maximum allowed for the int data type. I just couldn't find a viable option. This might be something to work on later. Perhaps a while statement that while std::cin is within a certain range – continue as planned, else put out a message.

- **Design**:

  The most difficult aspect of design for me was figuring how to set the "default" max and min values. This was a bit nonintuitive. If we were able to use arrays I could see how this implementation would change – as we could use nested loops to compare each element to one another (possibly). Once I learned I could use the first inputted number to set both min and max values, things flowed naturally. Also, matching the syntax for the final "difference" calculation was a bit tricky – it required careful use of std::cout to make it replicate the example in the assignment prompt.

- **Implementation**:

  The book has great examples for using for loops and conditional statements, so I made good use of them. Overall, this wasn't too challenging of an assignment so the book was pretty much the only resource I had to rely on.

- **Improvement**:

  Most of my issues stem from grabbing the first max and min value. The way my program is now is not very reusable. I'd like to try this with an array and possibly add two functions that would return the min and max values. That way we could have min = getMin(numArray) and max = getMax(numArray) or something similar. This would make main() much cleaner and easier to read.