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Comparisons assignment 7

For each pairwise comparison, where do you think your program is better? Why? Where do you think the other program is better? Why? (be detailed)

Vs. Patrick Galindez

Patrick's program is very similar to my program. Both programs find the correct answers by iterating through nested loops and adding the correct numbers to the final vector. Patrick's program sorts the array before the loops begin, which makes it possible for him to add the numbers to the mode directly from the 2nd loop. In my program, there is a 3rd loop that verifies that the number is not already in the mode vector prior to adding it and then sorts the vector at the end, this would be unneeded if I used the same setup as Patrick. It is hard to say where my program is better since they are very similar. I prefer the way that Patrick added the numbers to the mode, so I do not believe my program has anything that would constitute "better".

Vs. Danita Smith

Danita's program is also very similar to my program. However, Danita's program has the problem of placing all mode numbers into the vector, even if they have already been added. Her initial program is almost a mirror of mine, but she lacks the 3rd loop that verifies the modes have not been added to the vector already. This causes her program to not output the correct vector. My program is better because it verifies the content of the vector prior to adding more values. Danita could have placed a 3rd loop like my program or solved the issue as Patrick's program did to get around the issue.

Vs. Melanie Cisler

Melanie's program does not output the correct values for the mode. It only contains 1 for loop that does not accurately complete the assignment. My program is better because it outputs the correct values for the mode. I believe that Melanie was a little confused by the logic needed to accomplish the task. Her program changes the array values while it is still in the process of checking those numbers, causing erroneous numbers to be placed in the final mode vector.

What have you learned from looking at other people's code, and how can you apply it in future assignments? (be detailed)

From looking at other people's codes, I have learned how to think about logic from various viewpoints. For instance, I did not think of sorting the array prior to initializing the loops. Instead I thought up a way to solve the problem of if the same number is used farther into the array. It would have been simpler to sort the array first and then have the program add the mode to the vector if it were at the highest frequency. I also learned the various issues and views that other programmers have when solving the same task. While the basic idea was similar in all the correctly functioning code, each program had its own unique difference that make the program flow better or slightly differently.