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CS 161 – Alcon

Assignment 7 – Comparisons for Group 17

Comparison 1: Marisa's program

I think my program did a better job of checking for duplicates before writing modes to the

output vector.

• I also think my program did a better job of breaking down the findMode function into multiple

modular functions that the findMode function calls.

I think my comments did a better job describing each of my functions and my in-line comments

explained the purpose of each single line of code.

• I liked Marisa's formatting and use of white space. It made the program very easy to read.

• I also liked that Marisa's program was the most concise. It seemed like hers had the least code

out of all of ours.

Comparison 2: Sean's program

• I followed instructions better. Sean didn't comment out main and his program header didn't

match the format outlined in week 1 of the course. Though these don't affect the performance

of his code, these are still mistakes that can be fixed easily. He also has "using namespace std" in

his code instead of using the specific objects he needs in the std namespace.

I think I did a better job with formatting and using white space. Sean's code is hard to read –

there is very little white space, and the limited room between lines of code is completely filled in

with poorly formatted comments.

I did a better job of breaking the findMode function down into smaller modular functions. His

findMode function is long and the parts within it are not distinct from one another.

• I think my comments were better at describing what each function did and also describing the

purpose of each single line of code, while also being more readable.

I like that Sean sorted the array before finding the highest tally. If I had done that I could have

found the tally and duplicate modes using less code.

Comparison 3: Adam's program

- I think I did a better job of splitting my comments between function headers and in-line comments. Adam had lengthy header descriptions at the top of several sections of code, but his code lacked in-line comments to explain the purpose and function of single lines of code
- I think I did a better job of keeping my comments concise while also describing the code. His comments had too much text that took away from their readability as well as understandability.
- I think I did a better job of using modular functions to break my code down into smaller functions.
- I really liked how Adam organized his code. If the functions had been more concise and better spread out, his would have been the best organized code submitted to our group.
- I also liked that Adam sorted the input array before finding the tallies or modes. I wish I had thought of this.

<u>Learning/Improvements</u>

- Overall I felt like my code was the best for several reasons and the rest of the group came to that same conclusion themselves.
- That doesn't mean that my code was perfect though. I could learn something from each of the files my group submitted.
- For example, Marisa's program was very easy to read and concise. There were places in mine where I felt the comments took up too much white space so that it was a bit difficult to read.
- Sean's program sorted the input array first. If I had thought of that, some of my modular functions could have been shorter.
- Adam's code was organized very well and broke the code up into chunks. This made it easy to read and easy to understand. I also liked that he thought of sorting the array before running any other code on it.
- I think I could have improved my own code by further breaking down the modular functions to better adhere to the principle of single responsibility.
- Overall though, I was happy with my code and was even happier that my classmates all liked mine the most. It tells me that I have good programming habits, which will be very important as we continue through this course and program.