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CMPSC 121

Lab 12

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Reflection

This lab was interesting and got me thinking about what should go inside of main and what should not. I can see how a program could get “function heavy” where main is simply calling nothing but functions with variable declarations. This may get confusing to debug. I could also see where writing everything inside of main without a function could be troublesome as well (similar to what we did at the beginning of this course). In write report I could have done the calculations for the percentages inside of this or even moved it to a new function but I decided to just do the arithmetic in main and pass the percentage values into the writeReport function.

1. Why did we pass the struct as a reference variable?
   1. We did this to avoid a copy of the structure being created. Structures can be large objects and this can speed up performance.
2. Why did we declare it as const?
   1. We do not want to modify the structure, simply read it. Constant will treat the structure as read only in this situation – which is what we want.
3. Does it make sense to do both? Explain why it does or does not.
   1. I believe it depends. In this case, yes it makes sense but not in every situation. If our structure variables we read in from the file were to be modified then we may not want const. I believe it’s a good practice to pass struct objects by reference in most circumstances