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8.02 Assignment

As a programmer, there are many different ways one can go about solving a problem. While some possible solutions may be better than others, for any number of reasons, all are valid and at the disposal of each individual programmer. The question each programmer must ask themselves if they wish to improve is: how could I make my program objectively better than what it is now? Arguably the most important part to a program, besides basically functionality, is robustness. A program is robust when said code is able to be reused and/or can be added to easily. Since all of the example programs are successful in being functional, then a good programmer should prefer the most robust option.

HelloWorldV1 is the most simple program of all the given examples. It only has two actions, to print “Hello, Virtual World!\n”, and to print “It is a great day for programming.\n”. While a program being simple is not necessarily bad, this particular program is not very robust, as there is no simple way to add to the code and make it more functional.

HelloWorldV2 takes the design of HelloWorldV1, and places the print statements within a method printTwoLines(). This method is then called in the main method. This program is by far more robust than the previous example, as it is very simple to add functionality by calling the method more times, changing the method itself, etc.

Now, HelloWorldV3 is the most robust program. The reason why is that HelloWorldV3 is based on objects, instead of simply print statements and methods. Object Oriented Programming is a more robust way to program, because you can change the behavior of the object itself, instead of needed to change multiple variables or changing the program entirely. This also makes HelloWorldV3 more reusable, because in an entirely different program this code could be used with only small changes to the definition of the object being needed.

All programmers should strive to program in the style of HelloWorldV3. This program is still not as robust as possible, but it still remains the more robust option of all the given examples. For this reason, I prefer the style of programming shown in HelloWorldV3, as I feel it is objectively superior to other styles of programming.