

Programming Assignment 5:Complex Number Operator Overloading

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- (1) explain the differences in programming complex
number assignments using C and C++

First of all is the different ways of defining structure, and in C I would need to define functions to perform the calculations on complex numbers, while in C++, the overloading operators allows me to calculate directly.

Then is that C doesn't have a complex number's standard library, I would have to implement my own functions, while C++ provides the header: `complex`, which includes several functions to use for complex number manipulation.

- (2) discuss the advantages and/or disadvantages of
programming in C++

The advantage is that I can work with complex numbers directly from "class", which is much more convenient, there are functions in the standard library for me to use, and there is also the usage of operator overloading while also reducing risks.

The disadvantages is the complexity, and also it's compatibility, this can limit interoperability, all in all it seems that C++ is a good choice of computer language when it comes to complex number calculations.