

Differences in programming complex number assignments using C and C++:

In C, a structure is used to contain the real part and the imaginary part of a complex number. As for the operations such as addition, subtraction, multiplication, etc., individual functions are used to define / implement them. However, in C++, a class and overloaded operators are used to do this.

Advantages of programming using C++:

One of the main advantages of programming using C++ is that it has the idea of objects. This is very handy, as it allows the programmer to clearly show the relationships functions have related to an object / class. For instance, in the assignment when **a operator b**, where **a** is of class Complex, the functions are members of the class. However, if that is not the case, we have to use friend functions to define them. Another advantage of using a class is that one can directly access the elements inside the class using a function within the class without having to use "." or "->". For instance, when writing **the complex number assignment** using structures in C, "->" had to be used constantly, which makes writing the program somewhat inconvenient.