

Programming Assignment 5: Complex Number Operator Overloading

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(1) Differences

In C, complex number operations typically require the use of structures and separate functions.

In C++, we can define a class for complex numbers and overload operators to make arithmetic operations more intuitive.

(2) Advantages

1. Operator Overloading: C++ allows for operator overloading, which makes code more readable and maintainable.
2. Encapsulation: C++ classes encapsulate data and functions, providing a clear structure and reducing the likelihood of errors.

(3) Disadvantages

Performance: While C++ is efficient, certain features (like dynamic polymorphism) can introduce overhead.