Homework 3

Computer Programming (II)
Spring Semester, 2021

Write a class, named Complex, for complex numbers. Implement its add, multiply and print functions in a natural way. Please submit two files, Complex.h and Complex.cpp, so that the following program outputs "8.1 + 2i, 4 + 7i, 4 + 7i, 12.1 + 4i, 2 + 1i" when it is compiled with Complex.cpp:

```
#include <iostream>
#include "Complex.h"
#include "Complex.h"
using namespace std;

int main()
{
    Complex c1( 3.0, 2.0 );
    Complex c2 = c1;
    Complex c3( 5.1 );
    const Complex c4( 2.0, 1.0 );

    c1.add( c3 ).print();
    cout << ", ";
    c2.multiply( c4 ).print();
    cout << ", ";
    c2.print();
    cout << ", ";
    c1.add( c4 ).add( c4 ).print();
    cout << ", ";
    c4.print();
    cout << "\n";
}
```

When an object of type Complex is constructed with only one argument, the resulting complex number should have an imaginary part of zero. See, e.g., c3 in the above program.

My Screenshot