Lab – 4 Assignment

1. Create an immutable java class **Complex** that represents a complex number with integer real and imaginary components. It should have the following functionalities:
    a. Adding two complex numbers
    b. Subtracting two complex numbers
    c. Absolute value of complex number
    d. Conjugate of complex number
    e. Multiply two complex numbers
    f. Display the complex number as “a + bi”

2. Create a new class similar to the above in terms of functionalities but which supports the use of arbitrary types (int, float, double) to store the real and imaginary components.
   [Hint: Can be done by using object type and casting explicitly]

3. Create another class similar to (2) using generics.

4. Write a demo class called **ComplexDemo** to demonstrate the use of **Complex** classes created in (1), (2) and (3). This class should instantiate Complex class objects, call the functions mentioned in part (1) and print out the results.

Submission: Submit only 4 java files in a folder named as <Your_roll_noYour_name>