1-Write a class Complex that represents a complex number (real and imaginary parts). Overload the following operators:

- + to add two complex numbers.
- * to multiply two complex numbers.
- << for printing complex numbers.

Instructions:

- Define the class with private variables for real and imaginary parts.
- Implement constructors, operator overloads, and necessary methods.
- Overload << as a friend function.

File Structure:

- Complex.h : Class definition.
- Complex.cpp: Method and operator definitions.
- main.cpp : Usage and tests.

2-Create a class Fraction (with numerator and denominator). Write a friend function to check if two fractions are equal (after simplification).

Instructions:

- Implement Fraction class.
- Add a friend function bool isEqual(const Fraction&, const Fraction&).
- Include a method to reduce fractions to lowest terms.

File Structure:

- Fraction.h
- Fraction.cpp

3- Create a namespace shapes that contains a Circle and Square class. Each class must have a method to compute area.

- **Instructions:**
- Create the namespace and put both class definitions inside.
- Write area computation for each shape.
- In main.cpp, use using namespace shapes;, create objects and print their areas.
- **File Structure:**
- shapes.h (namespace and class definitions)
- shapes.cpp (method implementations)
- main.cpp
- main.cpp