Assignment-9
27-03-2023
(Constructors and methods)

1. WAP in Java to design a class Fraction having data members num and denom. Define no argument constructor, one argument constructor, two argument constructor and a copy constructor to set the values to numerator and denominator of different objects.

   Define methods such as show(), add(), subtract(), multiply(), div(), compare(), mixed() and reduce().
   Create different objects using different constructors given above. Perform the above operations using appropriate methods.
   Show the result in reduced form of the result fraction after each operation. After reducing if the fraction is an improper fraction then represent it in the form of mixed fraction.

2. Create a class *Complex* having member variables real and imag. Also create constructors and methods as follows:
   a) Complex()
   b) Complex(int,int)
   c) Complex(Complex)
   d) void showComplex()
   e) Complex addComplex(Complex) f) Complex substractComplex(Complex)
   g) Complex multiplyComplex(Complex)
   Write a java program to create objects of above class and perform operations as the methods specified above.