

North South University
Department of Electrical and Computer Engineering
CSE 215L: Programming Language II Lab

Lab – 6: Class & Object

Objective:

- To learn about class and objects
- To learn to implement a class using UML

Task:

Implement the following class and test its methods:

Fraction
- numerator: int - denominator: int
+ Fraction(numerator: int, denominator: int) + getNumerator(): int + getDenominator(): int + setNumerator(numerator: int): void + setDenominator(denominator: int): void + toString(): String + add(fraction: Fraction): void + sub(fraction: Fraction): void + multiplication(fraction: Fraction): void + division(fraction: Fraction): void

void add(Fraction fraction)

Adds two Fraction objects and **stores the result** into **calling object**. This is how addition is performed for fractions:

$$1 / 4 + 3 / 5 = 1 * 5 + 3 * 4 / 4 * 5 = 17 / 20$$

String toString()

Returns the value of the fraction in 1 / 2 format where 1 is numerator and 2 is denominator.

Now write a test program, take two Fraction objects. Print both of them. Test add, sub, multiplication and division methods. Print calling object after each method call.