Lab: Classes

Write a class called **Rat** which represents a <u>rational number</u>.

Data members

It contains an integer numerator and an integer denominator.

Constructors

Write a constructor that accepts all parameters.

Write another convert constructor which converts any integer that is passed as a single parameter to a rational number.

Write a default constructor that sets the rational number to value 0.

Member functions

Write:

      Accessor functions for each private instance variable.

      Mutator functions for each private instance variable.

Write a private helper function, which normalize the value: If both numerator and denominator are negative, this rational number is positive.

Write another private helper function which check if the denominator is 0 which is invalid.

Write a public function that adds two rational numbers and returns the result as a Rat type.

Write a function to output the rational number as form n/d.