Lab 3

Objective: To familiarise oneself with operator overloading

Questions

1. Create a C++ class named Counter that stores an integer value. Overload the unary decrement operator (--) to decrease the counter by 1. You must implement:
   a. Pre-decrement operator
   b. Post-decrement operator
2. Create a C++ class named Distance that calculates the difference between two distances measured in kilometres and metres. Overload the suitable arithmetic operator for this purpose.
3. Create a C++ class named String that compares two strings to see if they are the same or not. Use a suitable logical operator overloading for this purpose.
4. Create a C++ class named Distance that calculates the difference between two distances measured in kilometres and metres. Use multi-operator overloading for this purpose.
5. Create a class IntArray that simulates an array of integers. Overload the subscript operator [] to allow both reading and writing of array elements.