

CPSC 50100 Assignment 7

1. Write a code that calculates the Greatest Common Divisor (GCD) of two positive integers (user-defined inputs). Include an exception such that if their greatest common divisor equals to 1, it prints out the message, saying its GCD is 1.
2. Implement a queue class (for characters). You can use an array or a linked list.
 - (a) Build a test program that stores the alphabet using your queue.
 - (b) You can use enqueue() or dequeue() methods. In dequeue() method, you need to be able throw an exception where there is nothing to dequeue (e.g., **throw new RuntimeException("Queue underflow");**).
 - (c) Limit the size of the queue so that you can only store up to 10 characters. If you enter more than 10 characters, your test program should show an error message.