(40 points) 1. Write a program that reads a string from the keyboard first, then uses a recursive method to reverse this string, then prints out the reversed string.

(60 points) 2. Design and implement a program that implements Euclid's algorithm for finding the greatest common divisor of two positive integers. The greatest common divisor is the largest integer that divides both values without producing a remainder. An iterative version of this method was part of the `RationalNumber` class presented in Chapter 6 (p. 302).

In a class called `DivisorCalc`, define a static method called `gcd` that accepts two integers, `num1` and `num2`. Create a driver to test your implementation. The recursive algorithm is defined as follows:

- `gcd(num1, num2)` is `num2` if `num2 <= num1` and `num2` divides `num1`
- `gcd(num1, num2)` is `gcd(num2, num1)` if `num1 < num2`
- `gcd(num1, num2)` is `gcd(num2, num1%num2)` otherwise

**Turn in the following on the due date:**

1. A floppy disk with your program
2. A hard copy of your program