

# RECURSION

Write a program that computes the greatest common divisor that evenly divides two non-negative integers. “Evenly divides” means no (zero) remainder. Your program must include a recursive function with the following heading:

**int gcd(int m, int n)**

Euclid’s algorithm can be used to define gcd(m,n):

$$\text{gcd}(m, n) = \begin{cases} m & , n = 0 \\ \text{gcd}(n, m \% n) & , n \neq 0 \end{cases}$$

Here are some examples of correct answers:

gcd(0,0) returns 0

gcd(12,0) returns 12

gcd(1,1) returns 1

gcd(2,4) returns 2

gcd(10,25) returns 5