

C趣味编程百例(13)最大公约数和最小公倍数 PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/135/2021_2022_C_E8_B6_A3_E5_91_B3_E7_BC_96_c97_135545.htm 42.最大公约数和最小公倍数 求任意两个正整数的最大公约数和(GCD)和最小公倍数(LCM)*问题分析与算法设计 手工方式求两个正整数的大公约数的方法是用辗转相除法，在程序中可以模拟这种方式。* 程序与程序注释#include<stdio.h> void main(){ int a,b,num1,num2,temp; printf("Input a and num1, and b: "); scanf("%d %d", &a, &b); if(a < b){ temp = a; a = b; b = temp; } num1 = a; num2 = b; while(b != 0){ temp = b; b = a % b; a = temp; } printf("The GCD of %d and %d is: %d\n", num1, num2, a); num1 = a * num1; num2 = a * num2; temp = num1; num1 = num1 / a; num2 = num2 / a; printf("The LCM of them is: %d\n", num1 * num2); }