

gcd2.c

```
1 // write a c program to find gcd of two numbers using euclidean algorithm
2 #include <stdio.h>
3
4 int gcd(int a, int b) {
5     // Euclidean algorithm to find GCD
6     while (b != 0) {
7         int temp = b;
8         b = a % b;
9         a = temp;
10    }
11    return a;
12 }
13
14 int main() {
15     int a, b;
16     printf("Enter two integers: ");
17     scanf("%d %d", &a, &b);
18
19     // check for non-negative integers
20     if (a < 0 || b < 0) {
21         printf("Please enter non-negative integers only.\n");
22     } else {
23         int result = gcd(a, b);
24         printf("The GCD is: %d\n", result);
25     }
26     return 0;
27 }
```