

Problem No: 9

Problem Name: Write a c program to find the LCM of two numbers using Recursion.

Input	Output
70	
100	700

Source Code:

```
#include <stdio.h>

int gcd(int a, int b) {
    if (b == 0) {
        return a;
    } else {
        return gcd(b, a % b);
    }
}

int lcm(int a, int b) {
    return (a * b) / gcd(a, b);
}

int main() {
    int num1, num2;
    scanf("%d%d", &num1,&num2);
    printf("%d\n", lcm(num1, num2));

    return 0;
}
```

Result and Analysis:

In the gcd subfunction it returns itself recursively and, in the lcm subfunction it received two integers as well as the gcd subfunction it recursively calls the gcd subfunction again to show the result in mainfunction