

Experiment G-2

~~## include~~

include <stdio.h>

```
int GCD (int num1, int num2) {
    if (num2 == 0)
        return num1;
```

```
    else
        return GCD(num2, num1 % num2);
}
```

```
int main () {
    int a, b, result;
```

```
    printf ("----- GCD finder using Recursion ----- \n");
```

```
    printf ("Enter first number: ");
```

```
    scanf ("%d", &a);
```

```
    printf ("Enter second number: ");
```

```
    scanf ("%d", &b);
```

```
    printf ("Enter second number: ");
```

```
    scanf ("%d", &b);
```

```
    result = GCD (a, b);
```

```
    printf ("In The GCD of %d & %d is: %d \n", a, b, result);
    return 0;
```

Remarks: }

Teacher's Signature _____

main.c



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Output

```
1 #include <stdio.h>
2
3 int GCD(int num1, int num2) {
4     if (num2 == 0) {
5         return num1;
6     } else {
7         return GCD(num2, num1 % num2);
8     }
9 }
10
11 int main() {
12     int a, b, result;
13
14     printf("--- GCD finder using Recursion ---\n");
15     printf("Enter first number: ");
16     scanf("%d", &a);
17     printf("Enter second number: ");
18     scanf("%d", &b);
19
20     result = GCD(a, b);
21
22     printf("\nThe GCD of %d and %d is: %d\n", a, b, result);
23
24     return 0;
25 }
```

```
--- GCD finder using Recursion ---
Enter first number: 54
Enter second number: 24

The GCD of 54 and 24 is: 6

=== Code Execution Successful ===
```

