

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);

Result = GCD (a, b);

Buitf ("In The GCD of %d & %d is : %d\n", a, b, Result);

Remarks: } return 0;

Teacher's Signature _____

The screenshot shows a C online compiler interface from Programiz. On the left, the code for 'main.c' is displayed:

```
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 }
```

The 'Run' button is highlighted in blue. To the right, the 'Output' section shows the execution results:

```
--- GCD finder using Recursion ---
Enter first number: 54
Enter second number: 24
The GCD of 54 and 24 is: 6
== Code Execution Successful ==
```

The status bar at the bottom of the screen shows various Apple application icons, including Calendar (Oct 14), Music, and Wallet.