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ADVANCED JAVA TEST7

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Program:

```
import java.util.Scanner;

public class Test7 {

    public static void main(String args[]) {

        System.out.println("We are finding the gcd of the given numbers :");

        System.out.println("Enter the two values that to find its gcd");

        Scanner input = new Scanner(System.in);

        int x = input.nextInt();

        int y = input.nextInt();

        System.out.println(gcd(x, y));

        System.out.println("\nHere we are hardcoding the values of x and y as 63 and 42 respectively \n"+gcd(63, 42));

        input.close();

    }

    public static int gcd(int a, int b){

        if (b==0){

            return a;

        }else{

            return gcd(b, a% b);

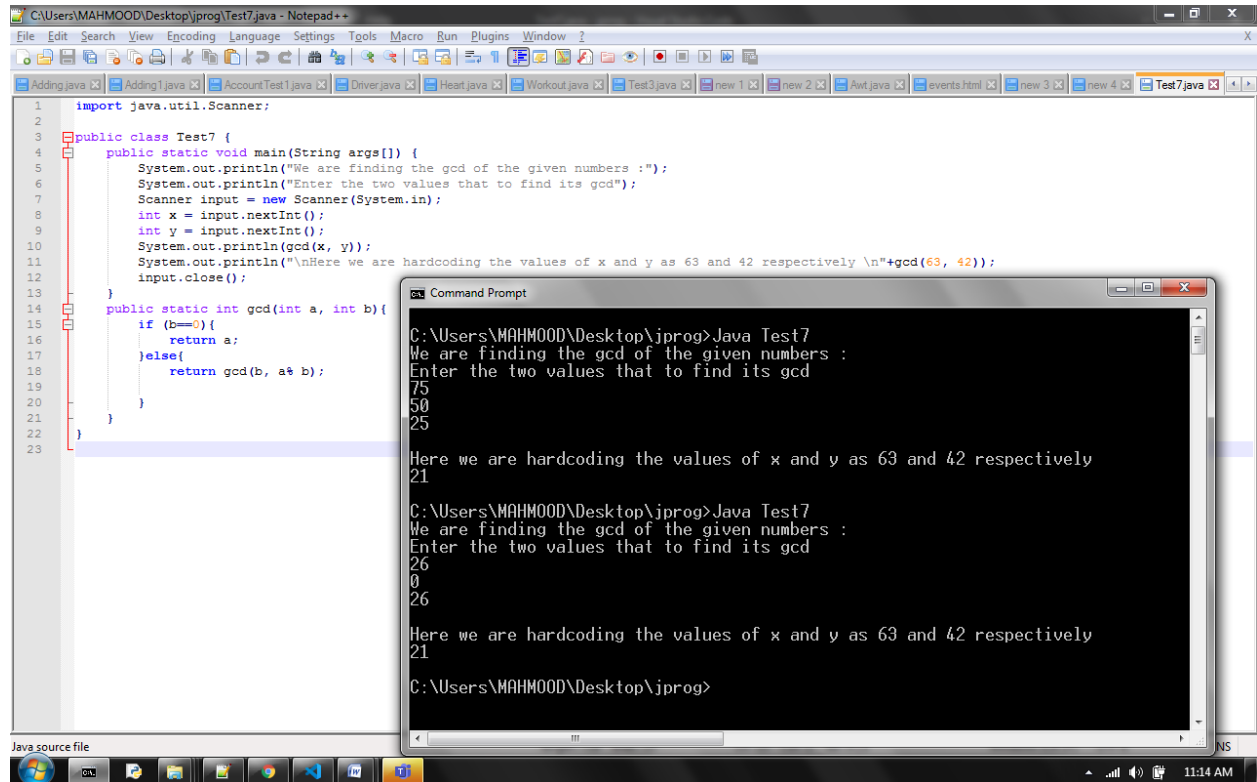
        }

    }

}
```

```
}  
  
}
```

Output :



The screenshot displays a Notepad++ editor window with a Java program named `Test7.java`. The code implements a recursive method to find the Greatest Common Divisor (GCD) of two numbers. The `main` method prompts the user to enter two values, but the program also includes a hardcoded example using `63` and `42`. A Command Prompt window is overlaid on the bottom right, showing the execution of `Java Test7`. It displays the program's output, including the prompts and the results of the GCD calculations for the user-provided values (75, 50, 25) and the hardcoded values (63, 42).

```
1 import java.util.Scanner;  
2  
3 public class Test7 {  
4     public static void main(String args[]) {  
5         System.out.println("We are finding the gcd of the given numbers :");  
6         System.out.println("Enter the two values that to find its gcd");  
7         Scanner input = new Scanner(System.in);  
8         int x = input.nextInt();  
9         int y = input.nextInt();  
10        System.out.println(gcd(x, y));  
11        System.out.println("\nHere we are hardcoding the values of x and y as 63 and 42 respectively \n"+gcd(63, 42));  
12        input.close();  
13    }  
14    public static int gcd(int a, int b){  
15        if (b==0){  
16            return a;  
17        }else(  
18            return gcd(b, a% b);  
19        )  
20    }  
21 }  
22  
23
```

Command Prompt Output:

```
C:\Users\MAHMOOD\Desktop\jprog>Java Test7  
We are finding the gcd of the given numbers :  
Enter the two values that to find its gcd  
75  
50  
25  
  
Here we are hardcoding the values of x and y as 63 and 42 respectively  
21  
  
C:\Users\MAHMOOD\Desktop\jprog>Java Test7  
We are finding the gcd of the given numbers :  
Enter the two values that to find its gcd  
26  
0  
26  
  
Here we are hardcoding the values of x and y as 63 and 42 respectively  
21  
  
C:\Users\MAHMOOD\Desktop\jprog>
```