

selection.c ● toh.c gcd_recursive.c X

```
gcd_recursive.c
1  #include <stdio.h>
2  int GCD(int , int );
3  int main()
4  {
5      int num1, num2,res;
6      printf("\nENTER TWO NUMBERS : ");
7      scanf("%d %d", &num1, &num2);
8      res=GCD(num1,num2);
9      printf("GCD OF %d AND %d = %d",num1,num2,res);
10     return 0;
11 }
12
13 int GCD(int x, int y)
14 {
15     int rem;
16     rem=x%y;
17     if(rem==0)
18     {
19         return y;
20     }
21     else
22     {
23         return (GCD(y,rem));
24     }
25 }
26
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

1: powershell



```
PS C:\Users\muska\OneDrive\Desktop\C programs> gcc gcd_recursive.c
PS C:\Users\muska\OneDrive\Desktop\C programs> .\a.exe
```

ENTER TWO NUMBERS : 60 24

GCD OF 60 AND 24 = 12

```
PS C:\Users\muska\OneDrive\Desktop\C programs> gcc gcd_recursive.c
```

```
PS C:\Users\muska\OneDrive\Desktop\C programs> .\a.exe
```

ENTER TWO NUMBERS : 15 10

GCD OF 15 AND 10 = 5

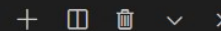
```
PS C:\Users\muska\OneDrive\Desktop\C programs> 
```

C toh.c

```
1  #include<stdio.h>
2  void towers(int n,char src,char temp,char dest)
3  {
4      if(n==1)
5      {
6          printf("move disk 1 from %c to %c\n",src,dest);
7          return;
8      }
9      towers(n-1,src,dest,temp);
10     printf("move disk %d from %c to %c\n",n,src,dest);
11     towers(n-1,temp,src,dest);
12 }
13 void main()
14 {
15     int n;
16     printf("Enter the number of disks\n");
17     scanf("%d",&n);
18     towers(n,'S','T','D');
19 }
20
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

1: powershell



```
PS C:\Users\muska\OneDrive\Desktop\C programs> gcc toh.c
PS C:\Users\muska\OneDrive\Desktop\C programs> .\a.exe
Enter the number of disks
3
move disk 1 from S to D
move disk 2 from S to T
move disk 1 from D to T
move disk 3 from S to D
move disk 1 from T to S
move disk 2 from T to D
move disk 1 from S to D
PS C:\Users\muska\OneDrive\Desktop\C programs> gcc toh.c
PS C:\Users\muska\OneDrive\Desktop\C programs> .\a.exe
Enter the number of disks
4
move disk 1 from S to T
move disk 2 from S to D
move disk 1 from T to D
move disk 3 from S to T
move disk 1 from D to S
move disk 2 from D to T
move disk 1 from S to T
move disk 4 from S to D
move disk 1 from T to D
move disk 2 from T to S
move disk 1 from D to S
move disk 3 from T to D
move disk 1 from S to T
move disk 2 from S to D
move disk 1 from T to D
PS C:\Users\muska\OneDrive\Desktop\C programs> |
```