

main.c

```
1  #include <stdio.h>
2  int gcd(int m,int n)
3  {
4      if(n==0) return m;
5      if(m<n) return gcd(n,m);
6      return gcd(n,m%n);
7  }
8  int main()
9  {
10     int m,n,res;
11     printf("Enter m and n\n");
12     scanf("%d%d",&m,&n);
13     res=gcd(m,n);
14     printf("GCD of %d and %d is %d.",m,n,res);
15
16 }
```

Console

Shell

```
> clang-7 -pthread -lm -o main main.c
```

```
> ./main
```

Enter m and n

2

4

GCD of 2 and 4 is 2.> |

main.c

```
1  #include <stdio.h>
2  int gcd(int m,int n)
3  {
4      int r;
5      do{
6          r=m%n;
7          m=n;
8          n=r;
9          return r;
10     } while(n!=0);
11 }
12 int main()
13 {
14     int m,n,res;
15     printf("Enter m and n\n");
16     scanf("%d%d",&m,&n);
17     res=gcd(m,n);
18     printf("The GCD is %d",res);
19 }
20 }
```

Console

Shell

```
> clang-7 -pthread -lm -o main main.c
```

```
> ./main
```

```
Enter m and n
```

```
4
```

```
6
```

```
The GCD is 4> |
```