

```
#include <stdio.h>

void TowerOfHanoi(int n, char src, char dst, char aux) {
    if(n>0){
        TowerOfHanoi(n-1, src, aux, dst) ;
        printf("move disk %d from peg %c to peg %c \n", n,src,dst);

        TowerOfHanoi(n-1, aux, dst, src) ;
    }
}

int gcd(int n1, int n2) {
    if (n2 != 0)
        return gcd(n2, n1 % n2);
    else
        return n1;
}

int main() {
    int n1, n2;
    printf("Enter two numbers: ");
    scanf("%d %d", &n1, &n2);
    printf("G.C.D of %d and %d is %d.", n1, n2, gcd(n1, n2));
    int n;
    printf("\n Enter no. of disks:");
    scanf("%d", &n);
    TowerOfHanoi(n, 'a', 'b', 'c');
    return 0;
}
```

Enter two numbers: 10 20

G.C.D of 10 and 20 is 10.

Enter no. of disks:5

move disk 1 from peg a to peg b
move disk 2 from peg a to peg c
move disk 1 from peg b to peg c
move disk 3 from peg a to peg b
move disk 1 from peg c to peg a
move disk 2 from peg c to peg b
move disk 1 from peg a to peg b
move disk 4 from peg a to peg c
move disk 1 from peg b to peg c
move disk 2 from peg b to peg a
move disk 1 from peg c to peg a
move disk 3 from peg b to peg c
move disk 1 from peg a to peg b
move disk 2 from peg a to peg c
move disk 1 from peg b to peg c
move disk 5 from peg a to peg b
move disk 1 from peg c to peg a
move disk 2 from peg c to peg b
move disk 1 from peg a to peg b
move disk 3 from peg c to peg a
move disk 1 from peg b to peg c
move disk 2 from peg b to peg a
move disk 1 from peg c to peg a
move disk 4 from peg c to peg b
move disk 1 from peg a to peg b
move disk 2 from peg a to peg c
move disk 1 from peg b to peg c
move disk 3 from peg a to peg b
move disk 1 from peg c to peg a
move disk 2 from peg c to peg b
move disk 1 from peg a to peg b

Process returned 0 (0x0) execution time : 36.763 s

Press any key to continue.