

Run ▶

main.c

```
1  #include <stdio.h>
2
3  void towers(int, char, char, char);
4
5  int main()
6  {
7      int num;
8
9      printf("Enter the number of disks : ");
10     scanf("%d", &num);
11     printf("The sequence of moves involved in the Tower of Hanoi are :\n");
12     towers(num, 'A', 'C', 'B');
13     return 0;
14 }
15 void towers(int num, char a, char b, char c)
16 {
17     if (num == 1)
18     {
19         printf("\n Move disk 1 from peg %c to peg %c", a, b);
20         return;
21     }
22     towers(num - 1, a, b, c);
23     printf("\n Move disk %d from peg %c to peg %c", num, a, b);
24     towers(num - 1, c, b, a);
25 }
```

Console

Shell

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

```
> ./main
```

Enter the number of disks : 4

The sequence of moves involved in the Tower of Hanoi are :

Move disk 1 from peg A to peg C

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 C

Move disk 1 from peg B to peg C

Move disk 2 from peg B to peg C

Move disk 1 from peg A to peg C

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 C

Move disk 1 from peg A to peg C

Move disk 3 from peg B to peg C

Move disk 1 from peg A to peg C

Move disk 2 from peg A to peg C

Move disk 1 from peg B to peg C