```c
/*
5b: Design,Develop and Implement a Program for Solving Tower of Hanoi problem
    with n disks.
*/

#include <stdio.h>
#include <stdlib.h>

void towers(int,char,char,char);                //Tower of Hanoi Function

int main()
{
    int n;                                      //Number of disks.

    printf("Enter the number of disks\n");
    scanf("%d", &n);

    printf("The sequence of moves are:\n\n");

    towers(n,'A','C','B');              /*Calling tower of Hanoi Function
                                        A : Source, B: Intermediate, C: Destination*/
    return 0;
}

void towers(int n, char frompeg, char topeg, char auxpeg)
{
    if(n==1)                    //If only one disk is there, just moving it directly.
    {
        printf("Move the disk 1 from peg %c to peg %c\n",frompeg,topeg);
        return;
    }

/*
The below function is recursive in nature.
(1) Moving the top n - 1 disks from peg A to peg B :A?B
(2) Moving the top disk from peg A to peg C: A?C.
(3) Moving the top n - 1 disks from peg B to peg C : B?C
*/

    towers(n-1,frompeg,auxpeg,topeg);           //if number of disks is n>1

    printf("Move the disk %d from peg %c to peg %c\n", n, frompeg,topeg);
    //(Printing the moves of discs)

    towers(n-1,auxpeg,topeg,frompeg);

}
```

OUTPUT:

```
Enter the number of disks
1
The sequence of moves are:

Move the disk 1 from peg A to peg C


Enter the number of disks
2
The sequence of moves are:

Move the disk 1 from peg A to peg B
Move the disk 2 from peg A to peg C
Move the disk 1 from peg B to peg C


Enter the number of disks
3
The sequence of moves are:

Move the disk 1 from peg A to peg C
Move the disk 2 from peg A to peg B
Move the disk 1 from peg C to peg B
Move the disk 3 from peg A to peg C
Move the disk 1 from peg B to peg A
Move the disk 2 from peg B to peg C
Move the disk 1 from peg A to peg C
```