

2. Implement Tower of Hanoi using 'C'.

**Code:**

```
#include <stdio.h>

void towerOfHanoi(int n, char source, char auxiliary, char destination)
{
    if (n == 1) {
        printf("Move disk 1 from peg %c to peg %c\n", source,
destination);
        return;
    }

    towerOfHanoi(n - 1, source, destination, auxiliary);
    printf("Move disk %d from peg %c to peg %c\n", n, source,
destination);
    towerOfHanoi(n - 1, auxiliary, source, destination);
}

int main() {
    int n;

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

    towerOfHanoi(n, 'A', 'B', 'C');

    return 0;
}
```

**Output:**

```
PS C:\Users\Ajay kumar\Desktop\SEIT-B\DSA\Lab\11> gcc .\main.c -o main
PS C:\Users\Ajay kumar\Desktop\SEIT-B\DSA\Lab\11> .\main
Enter the number of disks: 3
Move disk 1 from peg A to peg C
Move disk 2 from peg A to peg B
Move disk 1 from peg C to peg B
Move disk 3 from peg A to peg C
Move disk 1 from peg B to peg A
Move disk 2 from peg B to peg C
Move disk 1 from peg A to peg C
PS C:\Users\Ajay kumar\Desktop\SEIT-B\DSA\Lab\11>
```