

```
1 #include<bits/stdc++.h>
2
3 using namespace std;
4
5 //Recursive Function
6 int staircase(int n){
7     if(n<0){           //Base Case 1
8         return 0;
9     }
10
11    if(n==0){          //Base Case 2
12        return 1;
13    }
14
15    int count = 0;
16    count += staircase(n-1);    //Stepping 1 step
17    count += staircase(n-2);    //Stepping 2 step
18    count += staircase(n-3);    //Stepping 3 step
19
20    return count;
21 }
22
23
24 //Main
25 int main(){
26     int n;
27     cout<<"Enter number of stairs"<<endl;
28     cin>>n;
29
30     cout<<"No of ways to climb stairs are ";
31     cout<<staircase(n)<<endl;
32 }
```

```
22
23
24 //Main
25 int main(){
26     int n;
27     cout<<"Enter number of stairs"<<endl;
28     cin>>n;
29
30     cout<<"No of ways to climb stairs are ";
31     cout<<staircase(n)<<endl;
32
33     return 0;
34 }
35 }
```

```
▼ ↻ ⌂
Enter number of stairs
5
No of ways to climb stairs are 13

...Program finished with exit code 0
Press ENTER to exit console.
```