Recursive sequence

A function f is defined as follows F(n)= (1) +(2*3) + (4*5*6) ... n. Given an integer n the task is to print the F(n)th term.

Input:

The first line of input contains an integer T denoting the number of test cases. Then T test cases follow. Each test contains an integer n.

Output:

For each test case print the nth term of the sequence. .

Constraints:

1 <= T <= 10

1 <= N <= 10

Example:

Input:

2

5

7

Output:

365527

6006997207

```
1. #include<iostream>
2. #include<bits/stdc++.h>
3. using namespace std;
4. long long int sum(int n)
5. {
```

```
6.      if(n==0)
7.    {
8.        return 1;
9.    }
10.   int cut=((n*(n+1))/2)+1;
11.   long long res=1;
12.   for(int i=cut;i<cut+n+1;i++)
13.   {
14.       res=res*i;
15.   }
16.   res+=sum(n-1);
17.   return res;
18.}
19.void solve()
20.{
21.   int n;
22.   cin>>n;
23.   int t=n-1;
24.   cout<<sum(t);
25.}
26.int main()
27.{
28.       int t;
29.   cin>>t;
30.   while(t--)
31.   {
32.       solve();
33.       cout<<endl;
34.   }
35.}
```