**Reverse Coding :-**

Easy Accuracy: 61.45% Submissions: 61K+ Points: 2

You will be given an integer **n**, your task is to return the sum of all natural number less than or equal to **n**.

As the answer could be very large, return **answer modulo 109+7**.

**Example 1:**

**Input:**

**n = 6**

**Output:**

21

**Explanation:**

1+2+3+4+5+6 = 21

**Example 2:**

**Input:**

**n =** 4

**Output:**

10

**Explanation:**

1+2+3+4 = 10

**Your Task:**  
You don't need to read input or print anything. Your task is to complete the function sumOfNaturals() which takes a single integer n as input and returns sum of all numbers x upto **n**, i.e., **1 <= x <= n**.

**Expected Time Complexity:** O(1)  
**Expected Auxiliary Space:** O(1)

**Constraints:**  
0 <= n <= 107

**Code :-**

//{ Driver Code Starts

#include <bits/stdc++.h>

using namespace std;

// } Driver Code Ends

#define mod 1000000007

class Solution {

public:

int sumOfNaturals(int n) {

return ( (long long)(n % mod) \* ((n+1) % mod) / 2 ) % mod;

}

};

//{ Driver Code Starts.

int main() {

int t;

cin >> t;

while (t--) {

int n;

cin>>n;

Solution ob;

cout << ob.sumOfNaturals(n) << endl;

}

return 0;

}

// } Driver Code Ends

**T.C :- O(1)**

**S.C :- O(1)**