### Missing number in array

### Statement of Question—

Given an array of size **N-1** such that it only contains distinct integers in the range of **1 to N**. Find the missing element.

**Example 1:**

**Input:**

N = 5

A[] = {1,2,3,5}

**Output:** 4

**Example 2:**

**Input:**

N = 10

A[] = {6,1,2,8,3,4,7,10,5}

**Output:** 9

### JAVA CODE--------

import java.io.\*;

import java.util.\*;

class CodingMaxima {

public static void main(String[] args) throws IOException {

BufferedReader br =

new BufferedReader(new InputStreamReader(System.in));

int t = Integer.parseInt(br.readLine().trim());

while (t-- > 0) {

int n = Integer.parseInt(br.readLine().trim());

String[] str = br.readLine().trim().split(" ");

int[] array = new int[n - 1];

for (int i = 0; i < n - 1; i++) {

array[i] = Integer.parseInt(str[i]);

}

Solution sln = new Solution();

System.out.println(sln.missingNumber(array, n));

}

}

}

class Solution {

int MissingNumber(int array[], int n) {

int m=n\*(n+1)/2;

int sum=0;

for(int i=0;i<n-1;i++){

sum+=array[i];

}

return m-sum;

}

}