Question 1 Given an array A of sorted integers and another non negative integer k, find if there exists 2 indices i and j such that A[i] - A[j] = k, i!=j. Incorrect Marked out of Input Format F Flag question 1. First line is number of test cases T. Following T lines contain: 2. N, followed by N integers of the array 3. The non-negative integer k Output format Print 1 if such a pair exists and 0 if it doesn't. Example Input: 1 3135 4 Output: 1 input:

	Input	Expected	Got	
~	1 3 1 3 5 4	1	1	~
~	1 3 1 3 5 99	0	0	~

Your code failed one or more hidden tests.

Your code must pass all tests to earn any marks. Try again.

Question **∠**Correct
Marked out of 5.00

question

Sam loves chocolates and starts buying them on the 1st day of the year. Each day of the year, x, is numbered from 1 to Y. On days when x is odd, Sam will buy x chocolates; on days when x is exill not purchase any chocolates.

Complete the code in the editor so that for each day Ni (where  $1 \le x \le N \le Y$ ) in array arr, the number of chocolates Sam purchased (during days 1 through N) is printed on a new line. This is a only challenge, so input is handled for you by the locked stub code in the editor.

Input Format

The program takes an array of integers as a parameter.

The locked code in the editor handles reading the following input from stdin, assembling it into an array of integers (arr), and calling calculate(arr).

The first line of input contains an integer, T (the number of test cases). Each line i of the T subsequent lines describes the ith test case as an integer, Ni (the number of days).

Constraints

 $1 \le T \le 2 \times 105$ 

1 ≤ N ≤ 2 × 106

 $1 \le x \le N \le Y$ 

Output Format

For each test case, Ti in arr, your calculate method should print the total number of chocolates Sam purchased by day Ni on a new line.

Sample Input 0

3

2

\_

Input	Expected	Got	
1 2 3	1 1 4	1 1 4	
	4502	4200	
	296	1296 2588	~
71	2500		
100	1849	1849	
86	729	729	
54	400	400	
46	25	25	
9	1521	1521	
77	25	25	
9	49	49	
13 98	2401	2401	
000			

Question 3 Correct

Marked out of 7.00

₹ Flag

The number of goals achieved by two football teams in matches in a league is given in the form of two lists. Consider:

- Football team A, has played three matches, and has scored { 1, 2, 3 } goals in each match respectively.
- Football team B, has played two matches, and has scored { 2, 4 } goals in each match respectively.
- Your task is to compute, for each match of team B, the total number of matches of team A, where team A has scored less than or equal to the number of goals scored by team B in that match.
- In the above case:
- For 2 goals scored by team B in its first match, team A has 2 matches with scores 1 and 2.
- For 4 goals scored by team B in its second match, team A has 3 matches with scores 1, 2 and 3.

Hence, the answer: {2, 3}.

Complete the code in the editor below. The program must return an array of m positive integers, one for each maxes[i] representing the total number of elements nums[j] satisfying nums[j]  $\leq$  maxes[i] where  $0 \leq j < n$  and  $0 \leq i < m$ , in the given order.

It has the following:

nums[nums[0],...nums[n-1]]: first array of positive integers
maxes[maxes[0],...maxes[n-1]]: second array of positive integers

## Constraints

- 2 ≤ n, m ≤ 105
- 1  $\leq$  nums[j]  $\leq$  109, where 0  $\leq$  j  $\leq$  n.
- 1 ≤ maxes[i] ≤ 109, where 0 ≤ i < m.

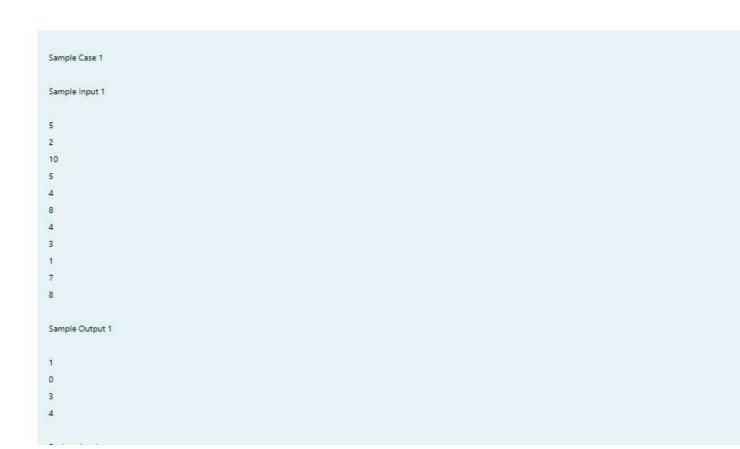
Input Format For Custom Testing

Input from stdin will be processed as follows and passed to the function.

The first line contains an integer n, the number of elements in nums.

The next n lines each contain an integer describing nums[j] where 0  $\leq$  j  $\leq$  n.

The next line contains an integer m, the number of elements in maxes.



1000	ed Got
4 1 4 2 4 2 3 5 5	2 4
15/	1 0 3 4