

# Practice problem - Bomb the base 🗸 📑

#### Statement

Solution

In Chefland, there are N houses numbered from 1 to N,  $i^{th}$  house has a defence system having strength  $A_i$ . Chef suspects a bomb drop on **one** of the houses very soon.

- A bomb with attack strength X can destroy the  $i^{th}$  house, if the defence system of the  $i^{th}$  house  $A_i$ , is **strictly less** than X.
- Also, when the  $i^{th}$  house is destroyed due to the bomb, all houses with indices j such that  $1 \le j < i$  get destroyed as well irrespective of their defence system.

Given **one** bomb with attack strength X, find the **maximum** number of houses that can get destroyed.

### **Input Format**

- The first line will contain T the number of test cases. Then the test cases follow.
- First line of each test case contains 2 integers N, X.
- Second line of test case contains N space separated integers  $A_1, A_2, \ldots, A_N$ .

### **Output Format**

For each test case, output in a single line the maximum number of houses that can get destroyed if the bomb can hit any house.

### Sample 1:

Input	<u>_</u>	Output	<u></u>
2 86 41616568 21 35		6 0	

## **Explanation:**

**Test Case 1:** The bomb can only destroy houses 1, 2, 4, and 6.

- If it hits house 1, only house 1 is destroyed.
- If it hits house  ${\bf 2}$ , houses  ${\bf 1}$  and  ${\bf 2}$  are destroyed.
- If it hits house 4, houses 1, 2, 3 and 4 are destroyed.