Find Index

Given an unsorted array Arr[] of N integers and a Key which is present in this array. You need to write a program to find the **start index**(index where the element is first found from left in the array) and **end index**(index where the element is first found from right in the array).

Input:

First line of input contains an integer T which denotes the number of test cases. First line of each test case contains a single integer N which denotes the number of elements in the array. Second line of each test case contains N space separated integers. Third line of each test case contains the key to be searched.

Output:

For each test case print two space separated integeres, first is the start index and second is the end index. If the key doesnot exist in the array then print -1 in this case.

Constraints:

```
1<=T<=100
1<=N<=10<sup>5</sup>
1<=Arr[i]<=10<sup>4</sup>
```

Example:

Input:

4

123455

5

6

654312

4

Output:

4 5

2 2