



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

D. Find the Different Ones!

time limit per test: 5 seconds memory limit per test: 256 megabytes input: standard input output: standard output

You are given an array a of n integers, and q queries.

Each query is represented by two integers l and r ($1 \le l \le r \le n$). Your task is to find, for each query, two indices i and j (or determine that they do not exist) such that:

- l < i < r;
- $l \leq j \leq r$;
- $a_i \neq a_j$.

In other words, for each query, you need to find a pair of different elements among $a_l, a_{l+1}, \ldots, a_r$, or report that such a pair does not exist.

Input

The first line of the input contains a single integer t ($1 \le t \le 10^4$) — the number of test cases. The descriptions of the test cases follow.

The first line of each test case contains a single integer n ($2 \le n \le 2 \cdot 10^5$) — the length of the array a.

The second line of each test case contains n integers a_1, a_2, \ldots, a_n $(1 \le a_i \le 10^6)$ — the elements of the array a.

The third line of each test case contains a single integer q ($1 \le q \le 2 \cdot 10^5$) — the number of queries.

The next q lines contain two integers each, l and r ($1 \leq l < r \leq n$) — the boundaries of the query.

It is guaranteed that the sum of the values of n across all test cases does not exceed $2\cdot 10^5$. Similarly, it is guaranteed that the sum of the values of q across all test cases does not exceed $2\cdot 10^5$.

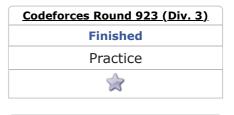
Output

For each query, output two integers separated by space: i and j ($l \le i, j \le r$), for which $a_i \ne a_j$. If such a pair does not exist, output i = -1 and j = -1.

You may separate the outputs for the test cases with empty lines. This is not a mandatory requirement.

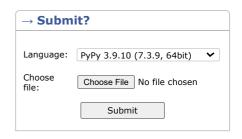
Example







→ Virtual participation



→ Last submissions		
Submission	Time	Verdict
245213792	Feb/06/2024 19:40	Accepted





```
1 2
1 4
2 3
2 4
5
1 4 3 2 4
1 5 2 4 3 4 5 5 2 3 1 4 2 7 1 2 1 4 1 5 2 4 2 5 3 5
4 5
 output
                                                                                                                                                                                        Сору
2 3
-1 -1
1 3
2 1
-1 -1
4 2
4 6 5 3
1 2
1 2
2 3
3 2
 1 3
2 4
3 4
5 3
5 4
1 2
4 2
1 3
2 3
3 2
5 4
5 4
```

<u>Codeforces</u> (c) Copyright 2010-2024 Mike Mirzayanov The only programming contests Web 2.0 platform Server time: Mar/21/2024 01:07:05^{UTC+5.5} (k2).

Desktop version, switch to mobile version.

<u>Privacy Policy</u>

Supported by



