110405 Shoemaker's Problem

A shoemaker has N orders from customers which he must satisfy. The shoemaker can work on only one job in each day, and jobs usually take several days. For the ith job, the integer T_i ($1 \leq T_i \leq 1,000$) denotes the number of days it takes the shoemaker to finish the job.

But popularity has its price. For each day of delay before starting to work on the ith job, the shoemaker has agreed to pay a fine of S_i ($1 \leq S_i \leq 10,000$) cents per day. Help the shoemaker by writing a program to find the sequence of jobs with minimum total fine.

Input

The input begins with a single positive integer on a line by itself indicating the number of the test cases, followed by a blank line. There is also a blank line between two consecutive cases.

The first line of each case contains an integer reporting the number of jobs N, where $1 \leq N \leq 1,000$. The ith subsequent line contains the completion time T_i and daily penalty S_i for the ith job.

Output

For each test case, your program should print the sequence of jobs with minimal fine. Each job should be represented by its position in the input. All integers should be placed on only one output line and each pair separated by one space. If multiple solutions are possible, print the first one in lexicographic order.

The output of two consecutive cases must be separated by a blank line.

Sample Input

```
1

4
3 4
1 1000
2 2
5 5
```

Sample Output

```
2 1 3 4
```