

FEPE-PE

Rank Time limit: 2 seconds

"Tank" is a cool person living in Taitung. His interest is to investigate and learn new things. Therefore, his dream is to get a job in CIA. When he was a student, he enjoyed to investigate the grades of his classmates and make a ranking table. Please write a program to help Tank to make the ranking table?

Note that the rank rule is as follows. First rule is to rank the score. The higher the score, the higher the ranking. If there are more than two students have same score, they will rank the same ranking. And they will list according to the lexicographical order for their student ID.

Input Format

The first line of the input gives the number of test cases, T. For each test case, the first line contains a positive number N, which indicating the total number of members in Tank's class. Each of the following N lines contains a string M and an integer S, which specifies the student ID M with score S. There is a space separate the student ID M and score S.

Output Format

For each test case, output N lines. Each line contains two integers and a string, R, M, and S, which specifies the rank R, the student ID M, and the score S. There is a space separate the rank R, the student ID M and score S. And there is a blank line between two consecutive test cases.

Technical Specification

- 1 ≤ *T* ≤ 303
- $2 \le N \le 10000$
- $1 \le S \le 10000$

Sample Input

2

3

A2 56

B8 75

C1 56

4

B1 15

B2 35



B3 15

B4 35

Sample Output

1 B8 75

2 A2 56

2 C1 56

1 B2 35

1 B4 35

3 B1 15

3 B3 15