

## Problem B: Programming Elections

The school year has just begun, and your programming team needs to hold elections for their two new co-presidents, one boy and one girl. After the elections occur and the votes are tallied, you have a list of the candidates and how many votes they received. Who won the election?

### Input:

The first line of the input provides the number of test cases,  $T$  ( $1 \leq T \leq 100$ ).  $T$  test cases follow. The first line of each test case contains an integer  $N$  ( $1 \leq N \leq 1000$ ), the number of students running for co-president.  $3 \cdot N$  lines follow (3 for each student), the first of which contains the student's name, the second of which contains 'M' or 'F', their gender, and the last contains an integer  $V$  ( $1 \leq V \leq 1000$ ), the number of votes they receive.

Note: No two students will have the same number of votes, and there will be at least one boy and one girl.

### Output:

For each test case, output one line containing the name of the female co-president and male co-president, separated by a space.

### Sample Input:

```
1
3
Alice
F
5
Bob
M
7
Charles
M
6
```

### Sample Output:

```
Alice Bob
```