**Task A. Segments**

On the straight line, *N* segments are given with integers coordinates of their ends. For each integer point of the straight line, we compute the number of those given segments to which it belongs. We denote the maximum value of this number by *m*, and the number of integer points that belonging to precisely *m* segments by *p*.

**Input**

Your program has to read the number of test cases from the first line in input. Each test case begins with a line, containing the number *N* and each of the following *N* lines contains two integers – the coordinates of the left and the right ends of a consecutive segment.

**Constraints**

The number of test cases is less than 15, 1 ≤ *N* ≤ 100000, the coordinates are in the range of –1000000000 till 1000000000 and the coordinates of the left end is less than the coordinate of the right end for each segment.

**Output**

For each test case your program should write on a separate line the values of *m* and *p*, as integers, separating by a space.

**Sample input:**

2

2

1 2

3 4

3

1 5

1 4

3 4

**Sample output:**

1 4

3 2