

12707 Block Meh

Everybody knows Korimbai. Though he does not have time for any one. He is a legend in his own.

Now once Korimbai got very angry with the puny humans around him. He decided to block them on his social networking website Korimboi. (Korimboi is very popular website among puny humans, every one of you have 1 or more account on that, though people do not know about the actual creator (Korimbai) / actual name (Korimboi) of the site, because as always Korimbai has no time for that.)

Korimbai is a strange man, so he wants to block them in a strange way. As the creator of korimboi he has this special power of blocking more than 1 people at 1 click. He does that in the following way.

He chooses one puny human given that puny human's entrance and exit time be S_1 and E_1 respectively in Korimadda (Chat client in Korimboi) and selects it for blocking. Then he finds another puny human whose entrance time and exit time be S_2 and E_2 respectively. He can select it if and only if $S_2 > S_1$ and $E_2 < E_1$. Now he search for another puny human whose entrance time and exit time be S_3 and E_3 respectively and $S_3 > S_2$ and $E_3 < E_2$. He continues this search until there are nobody available in those criteria that $S_i > S_{i-1}$ and $E_i < E_{i-1}$. Then he blocks all of them at once in one click.

Now Korimbai wants to give this puzzle to you for your brain exercise (of course he knows the answer. He is THE Korimbai, but he has no time for that). He wants to know that given all the entrance and exit time for the puny humans in his korimadda list what is the minimum number of click Korimbai needs to give to delete all of the puny humans of his list.

Input

First line of input will contain the number of test cases, $T \leq 20$ to follow. In each test case 1-st line contains N , number of puny humans in Korimbai's lists. N line follows each containing 2 integers S_i and E_i , entrance and exit time for the i -th puny human

- $N \leq 20000$
- $0 \leq S_i \leq E_i \leq 1000000$

Output

For each input, print the output in the format, 'Case X : Y ' (here, X is the serial of the input and Y is the minimum number of click Korimbai needs to give to delete all of the puny humans of his list.

Output Explanation

On the first test case Korimbai can block 1st \rightarrow 4th puny human in 1 click and 2nd in 1 click and 3rd in 1 click totaling 3 clicks. He cannot do less than that.

On the second test case Korimbai can block 1st \rightarrow 2nd \rightarrow 4th puny human in 1 click and 3rd in 1 click totaling 2 clicks. He cannot do less than that.

Sample Input

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2
4
1 5
2 5
3 5
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3 4
4
1 5
2 4
3 5
3 3

Sample Output

Case 1: 3
Case 2: 2