
IIITD and its deadline

Input file:	standard input
Output file:	standard output
Time limit:	0.5 seconds
Memory limit:	256 megabytes

CSE-222 Analysis and Design of Algorithms

Plagiarism: All submitted codes are expected to be the result of your individual effort. You should never misrepresent someone else's work as your own. In case any plagiarism case is detected you will get one grade reduction in final examination. Cite the resource wherever using other's code.

Instructions:-

- 1) You must complete this in the lab timing only and allowed programming language are python/Java/C/C++. If have doubt about the libraries and function to use ask the TA about it.
- 2) You must submit your working solution on Foobar on the foobar portal page from where you have downloaded this lab instructions sheet.
- 3) No extensions on deadline. If you fail to submit within will not be evaluated.
- 4) Mention your enrollment no. and name at starting of the file along with a brief.

Problem:

Another name of IIITD is "deadline". As you all know IIITD's life is a very busy life with lots of assignments and deadlines. You are also a student of IIITD and you know sometimes there are lots of assignments at the same time and it is not possible to do all the assignments. So, your task is to design an algorithm to choose the maximum number of assignments that can be done at a time.

Input

The first line consists of an integer T , the number of test cases. For each test case the first line consists of an integer N , the number of activities. Then the next N lines contain two integers m and n , the start and end time of each activity.

$1 \leq T \leq 10$

$1 \leq N \leq 100000$

$0 \leq \text{start} < \text{end} \leq 1000000$

Output

For each test case find the maximum number of assignments that you can do.

Examples

standard input	standard output
3 3 3 9 2 8 6 9 4 1 7 5 8 7 8 1 8 6 7 9 0 10 4 5 8 9 4 10 5 7	1 2 3
1 9 1 2 5 8 3 65 23 32 1 52 31 54 45 50 2 10 5 6	4