

Problem 5371 - Annoying Mosquitos

Multilingual



Time Limit	Memory Limit	Submissions	Accepted	Solved	Ratio
1 second	256 MB	179	109	98	66.667%

Description

Lee wants to go to bed but there are mosquitos on the wall in his room. He knows that they will try to bite him as soon as he is about to fall asleep, as they have been doing for the past couple of days. Since he appreciates the value of a good night sleep very much, he decides enough is enough and gets his fly swatter.

Unfortunately for him he was born with the distinct swatting disadvantage of being completely blind. The insects seem to comprehend this and keep really still to avoid triggering his heightened sense of hearing. Lee has no other choice but to hit the wall randomly, but luckily he's got a pretty large fly swatter: each swat hits all mosquitos in a square area of 101 by 101 units.

Input

On the first line one positive number: the number of test cases, at most 100. After that per test case:

- one line with an integer n ($1 \leq n \leq 100$): the number of mosquitos on the wall.
- n distinct lines with two space-separated integers x_i and y_i ($-1\,000 \leq x_i, y_i \leq 1\,000$): the position of the i -th mosquito.
- one line with an integer m ($1 \leq m \leq 10\,000$): the number of swats Lee tries.
- m lines with two space-separated integers x_j and y_j ($-1\,000 \leq x_j, y_j \leq 1\,000$): the midpoint of the j -th attempt.

Output

Per test case:

- one line with the number of mosquitos that get hit.

Sample Input 1 [Copy](#)

```
2
3
15 -10
16 40
17 41
1
15 -10
1
100 100
3
90 90
100 110
-500 -400
```

Sample Output 1 [Copy](#)

```
2
1
```

Source



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알고리즘 분류

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Memo