UCF Local Contest (Qualifying Round) — September 3, 2022

Square Fishing Net

filename: `fish`
Difficulty Level: `Easy-Medium`
Time Limit: `5 seconds`

With so many activities/events being virtual these days, we are going on a virtual fishing trip!

The Problem:

Given the (x,y) coordinates of n points (each point represents a fish) and a square (representing a fishing net), what is the maximum fish you can catch with one try? You can place the square net anywhere but its sides must be parallel to X-axis and Y-axis. A fish is caught if it is inside or on the boundary of the net.

The Input:

The first input line contains two integers: s ($1 \le s \le 100$), indicating the length of one side of the fishing net and n ($1 \le n \le 100$), indicating the number of fish. Each of the next n input lines contains two integers (each between 1 and 100, inclusive) indicating the (x,y) coordinates of one fish. Assume that no two fish are at the same location.

The Output:

Print the maximum number of fish you can catch.

Sample Input	**Sample Output**
3 8 2 1 2 3 5 1 5 2 3 2 4 2 10 5 11 5	6
50 2 10 5 11 5	2