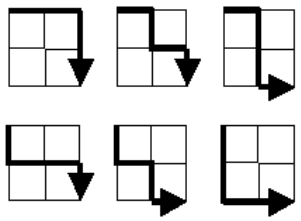
The Trail

Amrith has build his house in such a way that it consists of X x Y rooms. The top view of the house reveals that, his house is designed like an grid having X rows and Y columns. Each row consists of Y rooms. Amrith has filled all his rooms with books and hence he can move only across the corners of the rooms in his house.

One fine day, he spots a mouse in the top left corner of the top left room of his house. The mouse has only one option to escape through the door which is at the bottom right corner of the bottom right room of Amrith's house. The mouse can only move across the corners of the room. The mouse has created holes in all four corners of every room in the house for it to easily pass on to an adjacent room. Help the mouse find the total number of ways to move from the top left corner of the top left room of the house to the bottom right corner of the bottom right room of the house.



Input Format

The first line consists of T, the number of test cases. Each test case consists of X and Y which represents the size of the house. (House has X rows of Y rooms)

Constraints

- 1 <= T <= 1000
- 1 <= X <= 500
- 1 <= Y <= 500

Output Format

For each test case, output the total number of ways in which the mouse can reach the bottom right corner of the bottom right room of the house from the top left corner of the top left room of the house.

NOTE:- For each test case, output the answer modulo 10^9 + 7, since the answer can be very large

Sample Input 0

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2
2 2
3 2
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Sample Output 0

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6
10
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Explanation 0

2 x 2 grid has 6 possible ways to move from the top left corner of the grid to the bottom right corner of the grid as shown in the figure.