Sherlock and permutations

HackerRank

Problem Statement

Watson asks Sherlock:
Given a string S of N `0's` and M `1's`, how many unique permutations of this string start with `1`?

Help Sherlock by printing the answer modulo (10^9+7).

Input Format
First line contains T, the number of test cases.
Each test case consists of N and M separated by a space.

Output Format
For each test case, print the answer modulo (10^9+7).

Constraints
$1 \leq T \leq 200$
$1 \leq N,M \leq 1000$

Sample Input

```
2
1 1
2 3
```

Sample Output

```
1
6
```

Explanation
Test1: Out of all unique permutations ie. `01` and `10`, only second permutation satisfies. Hence, output is 1.
Test2: Out of all unique permutations ie. `00111 01011 01101 01110 10011 10101 10110 11001 11010 11100`, only `10011 10101 10110 11001 11010 11100` satisfy. Hence, output is 6.