

Sherlock and Permutations

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.