# **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**

 $1 \le T \le 200$  $1 \le N, M \le 1000$ 

# **Sample Input**

2 11 23

# **Sample Output**

1

# **Explanation**

6

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 10101 11001 11000 11100, only 10011 10101 10110 11001 11010 11100 satisfy. Hence, output is 6.