# **Problem M - Wabbits!**

# **Description**

There are *m* rabbits in a cage. *n* rabbits are black, and the rest are white. Someone leaves the door open, and all the rabbits escape, one by one. What is the probability of at least two black rabbits leaving the cage one after the other, without white rabbits in between?



#### Input

The input may consist of several test cases. Each line gives the total number of rabbits in the cage, m, and the number of black rabbits, n. There are at most 42 rabbits in the cage, of which at most 17 are black.

### Output

The output for each test case is the probability of at least two black rabbits leaving the cage one after the other, expressed as a fraction reduced to lowest terms. For example, if the probability is exactly 0.5, then the output should be 1/2, not 3/6 or 2/4.

**NOTE**: you are only allowed to use native, 32-bt integer arithmetic to solve this problem. Since mooshak cannot verify this automatically, it is your responsibility to adhere to these terms. Submissions making **any** use of floating-point or large-integer variables or values will not be accepted on review. Submissions will remain "pending" until they are checked and manually accepted as "final".

### **Example**

### **Example input:**

10 3 20 7

8 1 12 7

# **Example output:**

8/15 3087/3230 0/1 1/1