

Problem 1 – Jessy's Friend

Jessy is starting to study numbers, sequences of numbers and combinations of numbers in a more advanced level. She is trying to solve an exercise, which is rather easy for her to solve and to check with small numbers. However, it gets more complicated for her to figure it out with bigger numbers. She is very curious and she really wants to know what happens when bigger numbers are involved. Thus, as her friend, who studies programming, she has asked for your help.

Write a program that checks all possible **combinations of pairs** of numbers in a given interval and finds out for which **pair** the **sum** of its numbers is equal to a given '**magic number**'. If no such pair is found, let the user know that none of the pairs' sum equals the '**magic number**'. (see examples)

Input

- The input consists of 3 lines:
 - First line: You will receive the **starting number** for the given interval - **startInterval**
 - Second line: You will receive the **last number** for the interval - **endInterval**
 - Third line: You will get the so called '**magic number**' - **magicNumber**

Output

The output consists of 1 line:

- If you found a pair, which sum equals the '**magic number**', print the following information:

"Combination N:{number of the combination} ({pair's first number} + {pair's second number} = {magic number})"

- However, if you did not find any pair, which sum equals the '**magic number**', print the following:

"{the total amount of combinations} combinations - neither equals {magic number}"

Constraints

- **startInterval** - an integer within the range of [1...999]
- **endInterval** - an integer within the range of [bigger than **startInterval** ...1000]
- **magicNumber** - an integer within the range of [1...10000]

Scroll down to see the examples.

Examples

Input	Output
1 10 5	Combination N:4 (1 + 4 = 5)
Explanation	
<p>All possible combinations of pairs with numbers from 1 to 10 are the following:</p> <p>1 1, 1 2, 1 3, 1 4, 1 5, ... 2 1, 2 2, ... 4 9, 4 10, 5 1 ... 10 9, 10 10</p> <p>The first pair, for which the sum of its numbers is equal to the magic number 5 is the 4th one (1 4).</p>	

Input	Output
23 24 20	4 combinations - neither equals 20
Explanation	
<p>All possible combinations of pairs with numbers from 23 to 24 are the following:</p> <p>23 23, 23 24, 24 23, 24 24 (four in total)</p> <p>There is no pair, which sum is equal to the magic number.</p>	

Input	Output
88 888 1000	Combination N:20025 (112 + 888 = 1000)

Input	Output
88 888 2000	641601 combinations - neither equals 2000