# A test of "fundamentals of programming" 18 March 201 7

## Task 6 The sum of the two numbers.

Write a program that checks **all the possible combinations of paired numbers** **in the range of two given numbers**. The output is printed, **which in turn is a combination** whose **sum of the numbers** **is equal** to a **magic number**. If there is **No combination** corresponding to the condition is print  **the message that could not be found**.

### Login

The input is read from the console and consists of **three rows**:

        **The first row**– **start of interval** - **an integer** in the range **[1 .. 999]**

        **The second line**– **end of interval** - **an integer** in the range **[greater than the first number. 1000]**

        **Third row – the magic number — integer**in the interval **[1...10000]**

### Exit

The console must be printed **one line,**according to result:

        If you **found** **a combination** whose **sum of the numbers is equal to the magic number**

o **"Combination N: {sequence number} ({first number} + {second number} = {magic number})"**

        If **not found**combination meets the condition

o **"{the number of all combinations} combinations-neither equals {magic number}"**

### Sample input and output

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Login** | **Exit** | **Explanations** | **Login** | **Exit** |
| 1  10  5 | Combination N:4 (1 + 4 = 5) | All combinations of two numbers between 1 and 10 are:  1 1, 1 2, 1 3, **1 4**, 1 5, ... 2 1, 2 2, ... 4 10 5 1 4 9,, ... 10 9 10 10,  The first combination whose sum of the numbers is equal to the magical number 5 is **the fourth (1 and 4)** | 88  888  1000 | Combination N:20025 (112 + 888 = 1000) |
| **Login** | **Exit** | **Explanations** | **Login** | **Exit** |
| 23  24  20 | 4 combinations - neither equals 20 | All combinations of two numbers between 23 and 24 are: 23 23 23 24 24 23,,, 24 24 (total 4)  There are no pairs of numbers whose sum is equal to the magic 20 | 88  888  2000 | 641601 combinations - neither equals 2000 |