Category: Medium

Competition: Not included in any competition yet

Question:

**Is Facebook Cheating Us Again?**

The EU has finally come up with a hefty fine for Facebook. The problem is that the breach took a month for prevention after detection during which many new EU users joined Facebook. These new users must be accounted for in the fine. Obviously, the EU does not trust Facebook for authentic new user figures as it will try to evade charges. Help them verify Facebook’s reports.

Facebook is said to have **U** **users from EU** before the data breach was detected. It claims that **N** **new users from EU** joined after detection but before prevention. They also provided data saying that **F new friend requests** were sent which involved at least 1 new user and all. Assume that all these requests were accepted and no friend requests are sent between friends. **Verify N if U and F are assumed to be authentic**. If value of N is possible, print ‘y’ else print ‘n’ and the **minimum error** which would exist in the value of N.

**Input:**

3 single space separated values of U, F and N like:

U F N

**Output:**

‘Y’ or ‘N minimum\_error’ like:

Y

N 1200

**Constraints:**

0 <= U, F and N <= 1010

**Example:**

1.

1000 300000 254

N 12

2.

1000 300000 270

Y

**Test Cases:**

|  |  |
| --- | --- |
| **Input** | **Output** |
| 1000 300000 254 | N 12 |
| 1000 300000 270 | Y |
| 1000 300000 266 | Y |
| 10 500 10 | N 14 |
| 10 500 25 | Y |
| 10 500 23 | N 1 |
| 10 500 24 | Y |
| 10000000000 10000000000 10000000000 | Y |
| 10000000000 10000000000 5 | Y |
| 10000000000 10000000000 0 | N 1 |
| 0 0 0 | Y |
| 0 0 1000000000 | Y |
| 0 0 1 | Y |
| 123 0 0 | Y |
| 1 1 1 | Y |
| 0 10 0 | N 5 |