Goal

You are a Pigeon keeper, and you only have H holes on your terrace for your P pigeons. However, your P pigeons have friends, and they sometimes throw parties, so there might be more P pigeons. Because we live in the future, you have a machine that watches all the P pigeons get in each of the H holes, and at the end of the day the machine gives you a pigeons count in each hole. Now you want to know which hole has the most pigeons in it.

NOTE:

1. If there's multiple holes with the same number of pigeons, display the last hole.

2. The pigeons get in the holes in order. So, if there's 2 holes and 3 pigeons then the first pigeon will get in the first hole, the second pigeon in the second hole and the third and last pigeon in the first hole.

3. If there are no holes display ERROR instead.

You might know this from The Pigeonhole Principle

Input

Line 1: An integer H for the number of holes you have.

Line 2: An integer P for the number of pigeons coming to you terrace.

Output

Line 1: Index of the hole with the most pigeons.

Line 2: Number of pigeons in that hole.

Constraints

0 ≤ H ≤ 10^7

0 ≤ P ≤ 10^7

Example

Input

3

10

Output

0

4

3

10

0

4

**02**

No party tonight

0

1

ERROR

**03**

Just enough

34

34

33

1

**04**

Room for 2 please

327

654

326

2

**05**

Why are there so many?

16182

512425

10782

32

**06**

One...

1

1

0

1

**07**

Binary?

11101010

11010101

11010100

1