



STUDENT REPORT

DETAILS

Name

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Roll Number

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EXPERIMENT

Title

GENERATED NUMBERS

Description

You have a jar which initially contains N marbles. You can perform the below operations in any order:

- 1. Taking out A number of marbles from the jar.
- 2. Taking out B number of marbles from the jar.

Your task is to find and return an integer value, representing the total number of unique positive number of marbles that can be left behind by performing these operations, including the initial number of marbles.

Note:

You can perform the above operations any number of times and in any order keeping in mind that the jar should never become empty.

Input Specification:

A single line containing space seperated integers N,A,B

Sample Input:

10 3 5

Sample Output:

6

Source Code:

```
N,A,B = map(int,input().split())
def unique(N,A,B):
    unique_num = set()
    queue = [N]
    while queue:
        current = queue.pop(0)
        if current > 0 and current not in unique_num :
            unique_num.add(current)
            queue.append(current - A)
            queue.append(current - B)
    return len(unique_num)
print(unique(N,A,B))
```

RESULT

5 / 5 Test Cases Passed | 100 %

