Fibonacho

Professor Prumt calls an integer sequence a *Fibonacho sequence* if it satisfies

$$a_i = a_{i-3} + a_{i-1}$$

for every $i \geq 3$. Given a_3, a_4, and a_5, recover a_0, a_1, and a_2. It can be proven that these three preceding values are uniquely determined and are integers, although they may be negative.

Input

The only line contains three integers a_3, a_4, and a_5 ($0 \leq a_3, a_4, a_5 \leq 1000$).

Output

Output a single line containing the three integers a_0, a_1, and a_2, in that order.

Sample Input 1

```
1 2 3
```

Sample Output 1

```
0 1 1
```

Sample Input 2

```
13 4 52
```

Sample Output 2

```
-35 -9 48
```