A. Initial Bet

time limit per test

1 second

memory limit per test

256 megabytes

input

standard input

output

standard output

There are five people playing a game called "Generosity". Each person gives some non-zero number of coins b as an initial bet. After all players make their bets of b coins, the following operation is repeated for several times: a coin is passed from one player to some other player. Your task is to write a program that can, given the number of coins each player has at the end of the game, determine the size b of the initial bet or find out that such outcome of the game cannot be obtained for any positive number of coins b in the initial bet.

Input

The input consists of a single line containing five integers c_1, c_2, c_3, c_4 and c_5 — the number of coins that the first, second, third, fourth and fifth players respectively have at the end of the game ($0 \le c_1, c_2, c_3, c_4, c_5 \le 100$).

Output

Print the only line containing a single positive integer b — the number of coins in the initial bet of each player. If there is no such value of b, then print the only value "-1" (quotes for clarity).

Examples

input

Copy

```
2 5 4 0 4
```

output

Copy

```
3
```

input

Copy

```
4 5 9 2 1
```

output

Copy

```
-1
```

Note

In the first sample the following sequence of operations is possible:

1. One coin is passed from the fourth player to the second player;
2. One coin is passed from the fourth player to the fifth player;
3. One coin is passed from the first player to the third player;

4. One coin is passed from the fourth player to the second player.