Problem G
Treasure Key
Time Limit: 1 seconds

Harry finds an ancient book that may help him to get the key to open a treasure chest. The key is an ascending sequence of 9 unknown positive integers $a_1, a_2, \ldots, a_9$, each number is less than or equal to 1,000. In the book, there is a table T with 9×9 cells, and cell $T[i, j]$ contains the digital root of the product of $a_i \times a_j$:

$$T[i, j] = \texttt{DigitalRoot}(a_i \times a_j)$$

The digital root of a number is the sum of the digits in that number.   If the resulting sum consists of more than one digit, the digits must be summed up again, and so on until the sum is a single-digit number.

Example:
```
12345 ➔ 1+2+3+4+5 = 15
15    ➔ 1+5 = 6
DigitalRoot(12345) = 6
```
Please help Harry to find any valid treasure key from the table T.

Input

There are 9 lines in the input. Each line contains 9 digits, separated by spaces. Line i contains the digital roots of $a_i \times a_1, a_i \times a_2,\ldots, a_i \times a_9,$ for $1 \le i \le 9$.

Output

Display **"successful"** (without quotation marks) if Harry can find a valid treasure key from the table T. Otherwise, display **"failure"** (without quotation marks).

Sample Input

Sample Input	Sample Output
1 2 3 4 5 6 7 8 9 2 4 6 8 1 3 5 7 9 3 6 9 3 6 9 3 6 9 4 8 3 7 2 6 1 5 9 5 1 6 2 7 3 8 4 9 6 3 9 6 3 9 6 3 9 7 5 3 1 8 6 4 2 9 8 7 6 5 4 3 2 1 9 9 9 9 9 9 9 9 9 9	successful

Explanation: Harry can find the following key: 1 2 3 4 5 6 7 8 9