

1. Given a name  $S$ . Print "Hello, (name)" without parentheses.

**Input:**

programmer

**output**

Hello, programmer

---

2. Given two numbers  $X$  and  $Y$ . Print the summation and multiplication and subtraction of these 2 numbers.

**Input**

Only one line containing two separated numbers  $X, Y$  ( $1 \leq X, Y \leq 10^5$ ).

**Output**

Print 3 lines that contain the following in the same order:

1. " $X + Y =$  summation result" without quotes.
2. " $X * Y =$  multiplication result" without quotes.
3. " $X - Y =$  subtraction result" without quotes.

**Input:**

5 10

**output**

$5 + 10 = 15$

$5 * 10 = 50$

$5 - 10 = -5$

3. Given four numbers  $A$ ,  $B$ ,  $C$  and  $D$ . Print the result of the following equation :

$$X = (A * B) - (C * D).$$

Input

Only one line containing 4 separated numbers  $A$ ,  $B$ ,  $C$  and  $D$  ( $-10^5 \leq$

$A, B, C, D \leq 10^5$ ).

Output Print "Difference = " without quotes followed by the equation result.

Input:

1 2 3 4

output

Difference = -10

---

4. Given two numbers  $N$  and  $M$ . Print the summation of their last digits.

Input

Only one line containing two numbers  $N, M$

$(0 \leq N, M \leq 10^{18})$ .

Output

Print the answer of the problem.

Input:

13 12

output

5

Note

First Example :

last digit in the first number is 3 and last digit in the second

number is 2. So the answer is:  $(3 + 2 = 5)$

Given a number  $X$ . Print "EVEN" if the first digit of  $X$  is even number. Otherwise print "ODD".

For example: In 4569 the first digit is 4, the second digit is 5, the third digit is 6 and the fourth digit is 9.

Input

Only one line containing a number  $X$  ( $999 < X \leq 9999$ )

Output

If the first digit is even print "*EVEN*" otherwise print "*ODD*".

Examples

Input

4569

Output

EVEN

Input

3569

Output

ODD

**Note**

Second Example :

In 3569 the first digit is 3 and its ODD.

Memo and Momo are playing a game. Memo will choose a positive number  $a$ , and Momo will choose a positive number  $b$

.

Your task is to tell them who will win according to the following rules:

- If both  $a$

and  $b$  are divisible by  $k$

- ☐ , both of them win and you should print "Both".
- ☐ If  $a$  is divisible by  $k$  but  $b$
- ☐ isn't, Memo wins and you should print "Memo".
- ☐ If  $b$  is divisible by  $k$  but  $a$
- ☐ isn't, Momo wins and you should print "Momo".
- ☐ If both  $a$  and  $b$  are not divisible by  $k$

- , no one wins and you should print "No One".

Input

Only one line containing three positive numbers  $a$ ,  $b$  and  $k$  ( $1 \leq a, b, k \leq 1018$ ).

Output

Print the answer as described in the statement.

Examples

Input

15 7 3

Output

Memo

Input

22 10 2

Output

Both

A number of two digits is lucky if one of its digits is divisible by the other.

For example, 39, 82, and 55 are lucky, while 79 and 43 are not.

Given a number between 10 and 99, determine whether it is lucky or not.

Input

Only one line containing a single number  $N$

$(10 \leq N \leq 99)$

.

Output

Print "YES" if the given number is lucky, otherwise print "NO".

Examples

Input

39

Output

YES

Input

64

Output

NO