B. Even Numbers

Given a number N. Print all **even** numbers between 1 and N inclusive in separate lines.

Input

Only one line containing a number N ($1 \le N \le 10^3$).

Output

Print the answer according to the required above. If there are no even numbers print -1.

Examples

input

```
10
output
4
6
8
10
input
output
```

https://codeforces.com/group/MWSDmqGsZm/contest/219432/problem/C

C. Even, Odd, Positive and Negative

Given N numbers. Count how many of these values are even, odd, positive and negative.

Input

First line contains one number N ($1 \le N \le 10^3$) number of values.

Second line contains *N* numbers $(-10^5 \le X_i \le 10^5)$.

Output

Print four lines with the following format:

First Line: "Even: *X*", where *X* is the number of **even** numbers in the given input.

Second Line: "Odd: *X*", where *X* is the number of **odd** numbers in the given input.

Third Line: "Positive: X", where X is the number of **positive** numbers in the given input.

Fourth Line: "Negative: *X*", where *X* is the number of **negative** numbers in the given input.

Example

input

```
5
-5 0 -3 -4 12
```

output

```
Even: 3
Odd: 2
Positive: 1
Negative: 3
```

Note

First Example:

Even Numbers are: 0, -4, 12

Odd Numbers are: -5, -3

Positive Numbers are: 12

Negative Numbers are: -5, -3, -4

https://codeforces.com/group/MWSDmqGsZm/contest/219432/problem/D

D. Fixed Password(EOF)

Given multiple lines each line contains a number X which is a password. Print "**Wrong**" if the password is **incorrect** otherwise, print "**Correct**" and **terminate** the program.

Note: The "Correct" password is the number 1999.

Input

The input contains several passwords.

Each line contains a number X ($10^3 \le X \le 10^4$ - 1).

Output

Print "Wrong" if the password is typed wrong otherwise, print "Correct" if the password is typed correctly.

Example

input

2200

1020

1999

1000

9999

output

Wrong

Wrong

Correct

https://codeforces.com/group/MWSDmqGsZm/contest/219432/problem/E

E. Max

Given a number N, and N numbers, find **maximum** number in these N numbers.

Input

First line contains a number N ($1 \le N \le 10^3$).

Second line contains *N* numbers X_i ($0 \le X_i \le 10^9$).

Output

Print the maximum number.

Example

input

5

1 8 5 7 5

output

Q

https://codeforces.com/group/MWSDmqGsZm/contest/219432/problem/F

F. Multiplication table

Given a number N. Print the **maltiplication table** of the number from $\mathbf{1}$ to $\mathbf{12}$

For example: if N = 1

Input

Only one line containing a number N ($1 \le N \le 50$).

Output

Print 12 lines according to the required above.

Examples

input

1

output

```
1 * 1 = 1

1 * 2 = 2

1 * 3 = 3

1 * 4 = 4

1 * 5 = 5

1 * 6 = 6

1 * 7 = 7

1 * 8 = 8

1 * 9 = 9

1 * 10 = 10

1 * 11 = 11

1 * 12 = 12
```

input

2

output

```
2 * 1 = 2

2 * 2 = 4

2 * 3 = 6

2 * 4 = 8

2 * 5 = 10

2 * 6 = 12

2 * 7 = 14

2 * 8 = 16

2 * 9 = 18

2 * 10 = 20

2 * 11 = 22

2 * 12 = 24
```

https://codeforces.com/group/MWSDmqGsZm/contest/219432/problem/Q

Q. Digits

Given a number N. Print the **digits of that number** from right to left separated by space.

Input

First line contains a number T ($1 \le T \le 10$) number of test cases.

Next *T* lines will contain a number $N (0 \le N \le 10^9)$

Output

For each test case print a single line contains the digits of the number separated by space.

Example

input

```
4
121
39
123456
1200
```

output

```
1 2 1
9 3
6 5 4 3 2 1
0 0 2 1
```