

Problem A. 72769. Odd or Even

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Given an integer, n , perform the following conditional actions:

- If n is odd, print "Odd"
- If n is even, print "Even"
- If n is 0, print "None"

Input

A single line containing a positive integer, n . $0 \leq n \leq 100$

Output

Print Odd, Even or None according to the task.

Examples

standard input	standard output
5	Odd
89	Odd
0	None
16	Even
13	Odd
96	Even

Problem B. 72770. Super numbers

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Given an integer, n , perform the following conditional actions:

- If n is odd, print "Super"
- If n is even and in the inclusive range of 2 to 5, print "Not Super"
- If n is even and in the inclusive range of 6 to 20, print "Super"
- if n is even and greater than 20, print "Not Super"

Input

A single line containing a positive integer, n . $1 \leq n \leq 100$

Output

Print Super according to the task, otherwise print Not Super

Examples

standard input	standard output
3	Super
100	Not Super
14	Super
5	Super
89	Super

Problem C. 72772. Leap year

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

It is required to determine whether a given year is a leap. A year is a leap if the number is divided by 4, but not by 100, and also if it is divided by 400.

Input

Input a single number - the number of the year. $1 \leq year \leq 30000$

Output

Output "YES" or "NO"

Examples

standard input	standard output
2007	NO
2000	YES
3005	NO
2012	YES
30000	YES

Problem D. 72773. Steaks

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

After the personal contest, happy but hungry programmers dropped into the restaurant Kaganat and ordered n specialty steaks. Each steak is cooked by frying each of its sides on a frying pan for one minute. Unfortunately, the chef has only one frying pan, on which at most k steaks can be cooked simultaneously. Find the time the chef needs to cook the steaks.

Input

The only input line contains the integers n and k separated with a space $1 \leq n, k \leq 1000$

Output

Output the minimal number of minutes in which the chef can cook n steaks.

Examples

standard input	standard output
3 2	3
4 8	2
13 7	4
5 10	2
1 2	2
15 2	15

Problem E. 72776. Which one

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Input

Two integers are given.

Output

The program should output the number 1 if the first number is greater than the second, the number 2 if the second is greater than the first, or the number is 0 if they are equal.

Examples

standard input	standard output
2 7	2
4 3	1
9 5	1
100 1	1
1 1	0

Problem F. 72778. Sum

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

In this task, you should find the sum of all numbers from 1 to n .

Input

Given the positive integer n . $1 \leq n \leq 1000$

Output

Output the sum.

Examples

standard input	standard output
3	6
10	55
1	1
7	28
100	5050

Problem G. 72779. Maxi

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Given n integers. In this task, you should find the maximum from these numbers.

Input

In first line, given n . $1 \leq n \leq 1000$. In the second line, given n integer numbers.

Output

Output the maximum.

Examples

standard input	standard output
5 1 2 3 4 5	5
4 1 1 2 1	2
10 1 2 3 1 2 3 10 2 1 11	11
1 2	2
2 1 100	100

Problem H. 72782. Interesting problem

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Given n numbers you need to count the number of even and the number of odd numbers from the given list.

Input

In the first line, input n . $1 \leq n \leq 1000$ In the second line, given n integers

Output

In the first line, output the number of evens, after that output the number of odds.

Examples

standard input	standard output
5 1 2 3 4 5	2 3
1 2	1 0
10 1 1 1 1 1 1 1 1 1 1	0 10
3 1 2 1	1 2
8 4 4 4 4 4 4 4 4	8 0

Problem I. 72784. Great seven

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Among n numbers you need to count the number of numbers that ends with 7.

Input

In the first line, input n . $1 \leq n \leq 1000$. In the second line, input n positive integer numbers.

Output

Output the number of numbers that ends with 7.

Examples

standard input	standard output
1 4	0
10 7 77 7 7 7 7 7777 7 7 77	10
4 10 71 70 7	1
5 10 10 10 10 13	0
7 7 7 7 7 7 7 71	6

Problem J. 72785. From zero to hero

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Given n numbers you need to output the number of zeros among these numbers.

Input

In the first line, input n . $1 \leq n \leq 1000$. In the second line, input n positive integer numbers.

Output

Output the answer to the problem.

Examples

standard input	standard output
5 100 10 101 11 50	5
4 301 1 20 88	2
7 1 1 1 1 1 1 1	0
2 101 10	2
8 10 1000 10101 5 1 2 10 51	7

Problem K. 72787. Super square

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Find all exact squares of natural numbers that do not exceed a given number N .

Input

Given positive integer N .

Output

Output answer for the problem in each line.

Examples

standard input	standard output
10	1 4 9
21	1 4 9 16
4	1 4
16	1 4 9 16
1000	1 4 9 16 25 36 49 64 81 100 121 144 169 196 225 256 289 324 361 400 441 484 529 576 625 676 729 784 841 900 961

Problem L. 72789. 2Power

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

For a given number N , print out all integer powers of two that do not exceed N , in increasing order.

Input

Given positive integer N .

Output

Output answer for the problem.

Examples

standard input	standard output
50	1 2 4 8 16 32
32	1 2 4 8 16 32
1	1
28	1 2 4 8 16
100	1 2 4 8 16 32 64

Problem M. 72792. Bitwise AND

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Given two integers a and b . You should do AND operation between them.

Input

Given two integers a, b . $1 \leq a, b \leq 100$

Output

Output the answer to the problem.

Examples

standard input	standard output
1 2	0
5 10	0
7 7	7
12 13	12
0 100	0

Problem N. 72794. Bitwise OR

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Given two integers a and b . You should do OR operation between them.

Input

Given two integers a, b . $1 \leq a, b \leq 100$

Output

Output the answer to the problem.

Examples

standard input	standard output
1 4	5
10 14	14
33 33	33
15 18	31
23 87	87

Problem O. 72795. Bitwise XOR

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 256 megabytes

Given two integers a and b . You should do XOR operation between them.

Input

Given two integers a, b . $1 \leq a, b \leq 100$

Output

Output the answer to the problem.

Examples

standard input	standard output
0 1	1
1 1	0
0 0	0
21 14	27
1 15	14