Problem A. 73001. Aisha's program

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

Aisha is in her early stage of learning Computer Science in school. But she already knows how to write easy programs. One day she wanted to surprise friends who do not know programming. So she wants you to help to write a program which greets her friens.

Input

Input line contains a string - name of the user.

Output

Write "Hello"with user's name.

Examples

standard input	standard output
Arman	Hello Arman
Erlan	Hello Erlan

Problem B. 73207. Different numbers

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

Given an array consisting of integers. It is known that the numbers are ordered by nondecreasing (that is, each next element is not less than the previous one). Write a program that determines the number of different numbers in this array.

Input

Input line contains the number N - the number of elements in the array and N integer numbers.

(1 <= N <= 100)

elements of array between -1000 and 1000

Output

Output a single number - the number of different numbers in the array.

Examples

standard input	standard output
3 1 2 3	3
4 -2 -2 3 4	3

Problem C. 73245.Dollars

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

Imagine you have A dimes(10 cents), B quarters(25 cents), C nickels(5 cents) and D dollars(100 cents) What is a total amount of money you have?

Input

In the first line, you are given 4 numbers A, B, C, and D ($0 \leq A, B, C, D \leq 100$).

Output

Print out a number of dollars and cents you have

Examples

standard input	standard output
41 83 45 58	85 10
54 92 66 59	90 70
32 69 7 81	101 80

Problem D. 73256.Sum of digits

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

You are given an integer number N. Calculate the sum of digits of N.

Input

The first line of the input contains an integer N ($100 \le N \le 999$)

Output

Print the answer

Examples

standard input	standard output
538	16
658	19

Problem E. 73269.Black or White

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

Imagine a regular chess table. You are given two integers that are coordinates of some field of the chess table. Your task is to find out whether the color of the field is white or black.

Input

The first line of the input contains two integers x, y ($1 \leq x, y \leq 8$)

Output

Print 'white' if the given field is white or 'black' if the color of the given field is black.

Examples

standard input	standard output
3 4	black
3 8	black
3 5	white
1 1	white

Problem F. 73274.GCD

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

You are given two integers a and b. Find the greatest common divisor of a and b.

Input

The first line of the input contains two integers a, b ($1 \leq a, b \leq 10000$)

Output

Print the answer

Examples

standard input	standard output
9139 9252	1
15 21	3
2 6	2

Problem G. 73550.difference

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

You have n numbers you should find difference between maximum and minimum from this number

Input

You have n - amount of numbers,and then n numbers

n between 1 and 100 numbers between 1 and 1000

Output

Print difference between maximum and minimum from this numbers

Examples

standard input	standard output
5 1 2 3 4 5	4
10 4 6 9 5 9 2 5 4 6 1	8

Problem H. 73561. Zeroes

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

Find the count of zeroes in given array.

Input

Input line contains the number N - the number of elements in array and N integer numbers.

$(1 <= N <= 100)$

Output

Output the answer.

Examples

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

Problem I. Alphabet

Input file:	standard input
Output file:	standard output
Time limit:	2 seconds
Memory limit:	64 megabytes

You are given string S which consist of letter in interval $A..D$. Your task is to find out how often each letter found in the line.

Print only the letters that exists in the given line in the following format: LETTER COUNT for example : (A 1). The letter have to be printed in alpahbet order (A, B, C, D).

Examples

standard input	standard output
AAABBBC	A 3 B 3 C 1
CDD	C 1 D 2

Problem J. 73727.xor array

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

You have array you should find xor of all elements in this array

Input

You have number n - size of array, and then n elements of array, each element of array between 1 and 1000.

$(1 <= n <= 100)$

Output

Output xor of all elements of array

Examples

standard input	standard output
2 5 9	12
2 5 5	0