Problem A. 79005 Air conditioner

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

Given prices of air conditioners. Find how much we will pay in 5 years if the cost of service for one year is 100tg and we need to spend as little money as possible.

Input

First line contains n - amount of air conditioners (0<=n<=100).Then n times given prices of air conditioners.

Output

Print solution for the problem.

Example

standard input	standard output
3 100 30 50	530

Problem B. 78667 Hunter

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

Hunter on the first i = 1 day of the hunt met n rabbits. Every next i-th day he met 2 * i more rabbits than on first day. Find how much in total rabbits he met in d days of hunting.

Input

Input contains integers n and d. (0<=n<=100, 1<=d<=1000)

Output

Print solution for this problem.

Example

standard input	standard output
5 5	145

Problem C. 79183 Love

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

n times given the name of the person and the name of the person in whom this person is in love. Print the names of people in a sorted order who have at least one lover.

Input

First line contains n - (1<=n<=30). Then n times given name of person and name of person in whom this person is in love.

Output

Print solution for the problem.

Example

standard input	standard output
3 Almat Alima Batyr Ospan Almat Ospan	Alima Ospan

Note

You should solve this problem using map.

Problem D. 79199 Sapper

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

m times given coordinates of nxn 2D array where bomb is located. Then given coordinate where the sapper assumes the presence of a bomb. Print "YES"if the sapper guessed the coordinate of at least one bomb, otherwise print "NO".

Input

First line contains n - size of 2D array and m amount of bomb located in 2D array(1<=n<=100, 0<=m<=10). Then m times given coordinates i j - location of bomb(0<=i<=99, 0<=j<=99). Last line contains coordinates i j - where sapper thinks bomb is.

Output

Print solution for the problem.

Example

standard input	standard output
4 2 1 1 2 2 2 2	YES

Problem E. 78562 Sphere inside cube

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

Given radius of sphere r and side of cube s. Determine if we can put sphere inside cube.

Input

A single line containing integer, r and s. (1<=r<=1000, 1<=s<=1000).

Output

Output "YES"or "NO"

Example

standard input	standard output
1 3	YES

Problem F. 79051 Sum

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

Two arrays are given. Calculate the sum of all elements in both arrays. If sum of first array is bigger print '1', print '2' if sum of the second array is bigger, print '0' otherwise.

Input

First line contains integers n - size of first array and m - size of second array(0<=n<=100, 0<=m<=100). Second line contains elements of first array. Third line contains elements of second array.

Output

Print solution for the problem.

Example

standard input	standard output
5 5 1 2 3 4 5 0 1 2 7 19	2

Problem G. 79091 Change char

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

Given character. If character is in lowercase convert it into upper case, if character is in upper case convert into lowercase, otherwise print "error".

Input

Contains single character.

Output

Print solution for the problem.

Examples

standard input	standard output
A	a
1	error