Problem A. 73589.bigger or less

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

You are given array. Find sum of all elements which bigger than 1000 or less than 100

Input

You have n - size of array, and n elements of array.

(1 <= n <= 100)

Output

Sum of all elements which bigger than 1000 and less than 100

Examples

standard input	standard output
5 100 1 1500 5 220	1506
7 1 10 1500 150 500 300 2000	3511

Problem B. Bottles

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

You are given N bottles with water. Each bottle described by two integers: remaining volume of water a[i] and bottle's capacity $b[i](a[i] \leq b[i])$.

Determine is it possible to pour all remaining water into just 2 bottles!

Input

The first line of the input contains one integer N $(2 \leq n \leq 10^2)$ — number of bottles.

The second line contains N space-separated integers $a1, a2, ..., aN$ $(0 \leq ai \leq 10^5)$ — volume of remaining water in bottles.

The third line contains N space-separated integers $b1, b2, ..., bN$ $(ai \leq bi \leq 10^5)$ — capacities of the bottles.

Output

Print "YES"(without quotes) if it is possible to pour all remaining water into 2 bottles, otherwise print "NO"(without quotes).

Examples

standard input	standard output
2 3 5 3 6	YES
3 6 8 9 6 10 12	NO

Problem C. 73487.test

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

You are given an array. Find the index of the element whose parity is different from the parity of the other elements.

Guaranteed that only one number has different parity

Input

The first line contains an integer N — size of array. The second line contains $N(1 \leq N \leq 100)$ integer numbers

Output

Output index of the element whose parity is different from the parity of the other elements

Examples

standard input	standard output
4 1 2 4 6	1
4 3 5 6 7	3

Note

The index of the numbers starts from 1

Problem D. 73742.Arithmetic progression

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

The first and second elements of the arithmetic progression are given. You should find N-th element of the arithmetic progression

Input

The input contains three integers separated by spaces - the first element of the progression - $A1(1 \leq A1 \leq 1000)$, the second element of the progression - $A2(1 \leq A2 \leq 1000)$, and the number of the required element $N(1 \leq N \leq 1000)$.

Output

The output must contain one integer - the Nth element of the arithmetic progression.

Examples

standard input	standard output
1 5 3	9
44 48 98	432
5 138 7	803

Problem E. 73268.no cycle

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

You are given an integer N. You have to print the sum of numbers from 1 to N.

Input

The first line of the input contains one integer N pay attention to restrictions ($1 \leq N \leq 1000000000$)

Output

Print the answer

Examples

standard input	standard output
167959139	14105136270790230
641009859	205446819988104870
2	3
5	15

Note

If you use cycle to solve this problem you solution will not take accepted

Problem F. 73202. Prime

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

Write a program to check whether a number prime or not.

Input

Input line contains a single integer N.

(1 <= N <= 1000)

Output

Print "yes"if the number is prime or "no"otherwise.

Examples

standard input	standard output
2	yes
67	yes
177	no

Note

A prime number is a whole number greater than 1 whose only factors are 1 and itself. A factor is a whole numbers that can be divided evenly into another number. The first few prime numbers are 2, 3, 5, 7, 11, 13, 17, 19, 23 and 29.

Problem G. 73720.bear and 375

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

Help bear to find sum of elements in the array which divides into 3 or 7 or 5.

Input

You have n - size of array, then n elements of array

size of array between 1 and 100

Output

Output sum of elements in the array which divides into 3 or 7 or 5.

Examples

standard input	standard output
3 3 7 5	15
2 77 55	132

Problem H. 73451. Pineapple

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

Erasyl is a very generous guy. He wants to give his friends a pineapple. How many pineapples can he buy, if everyone costs a, and money from him b.

Input

Input the price of the pineapple a and the money that Erasyl has b.

(1 <= a <= 1000) (1 <= b <= 1000)

Output

Output the number of pineapples.

Examples

standard input	standard output
2 12	6
2 44	22

Problem I. 73484. Three-digit number

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

Given the some number. Determine whether the number is a three-digit number.

Input

Input the number N.

(1 =< N =< 100000)

Output

Output "YES"if this number three-digit else output "NO".

Examples

standard input	standard output
32	NO
222	YES
43	NO

Problem J. 73396.triangle

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

In this problem you should find can three sides form a triangle

Input

You have three sides of triangle a,b,c Sides sides of triangle between 1 and 1000

Output

if this three sides can create triange output "Yes"else "No"

Examples

standard input	standard output
3 4 5	Yes
4 5 6	Yes