Sl No	Problem Statement
	Write the Lex program for the following:

# 1 The Egg

"The Egg" is an egg supply company which supplies eggs to retailers. They have N number of eggs with them. They accept orders for K eggs. In response, they confirm if they can supply the eggs with a "Thank you" note. If the number of eggs ordered is greater than or equal to the total number of eggs in stock then they respond back with the "sorry" note.

### **Input format**

First line of the input contains the total Number of Eggs available in company N. Second line of the input contains the K Number of Eggs ordered by the retailer.

#### **Constraints**

 $1 \le N \le 10000$  $1 \le K \le 10000$ 

### **Output format**

First line of the output contains the K number of Eggs . Second line of the output contains The note ( Sorry or  $Thank\ You$  ).

Sample Input 200 150	Sample Input 350 350	<b>Sample Input</b> 50.05 25	Sample Input 10000 10.0	Sample Input 550 600
Sample Output	Sample Output	Sample Output	Sample Output	Sample Output
150 Thank You	350 Sorry	25 Invalid	10.0 Invalid	600 Sorry

## 2 **String Toggle**

You have been given a String S consisting of uppercase and lowercase English alphabets. You need to change the case of each alphabet in this String. That is, all the uppercase letters should be converted to lowercase and all the lowercase letters should be converted to uppercase. You need to then print the resultant String to output.

## **Input format**

First line of the input contains the String S.

### **Constraints**

 $1 \le |S| \le 100$  where **S** denotes the Length of the string

## **Output format**

First line of the output contains the resultant String on a single line.

Sample Input	Sample Input	Sample Input	Sample Input
NiTk	ABcde70	10253	HELLO world
Sample Output	Sample Output	Sample Output	Sample Output
nItK	-1	-1	hello WORLD

#### **Find Minimum**

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Due to the demonetization move, there is a long queue of people in front of ATMs. Due to the withdrawal limit per person per day, people come in groups to withdraw money. Groups come one by one and line up behind the already present queue. The groups have a strange way of arranging themselves. In a particular group, the group members arrange themselves in increasing order of their height(not necessarily strictly increasing). Mozzie observes a long queue standing in front of the ATM near his house. Being a curious kid, he wants to count the total number of groups present in the queue waiting to withdraw money. Since groups are standing behind each other, one cannot differentiate between different groups and the exact count cannot be given. Can you tell him the minimum number of groups that can be observed in the queue?

#### **Input format**

The first line of input contains positive integer N(indicating the total number of queues). The second line contains N space-separated integers denoting the number of groups in each queue.

#### **Constraints**

$$1 \le N \le 1,00,000$$

### **Output format**

First line of the output contains the **minimum number of groups** present in the **N** number of queues.

Sample Input	Sample Input	Sample Input	Sample Input
5 6 2 9 4 10	8 20 3 41 1 15 7 5 8	0	25.5
Sample Output	Sample Output	Sample Output	Sample Output
2	1	Invalid	Invalid