A: An Easy Task

Time limit: 2 sec, Memory Limit: 1 MB

There is an inter-university race competition going on. Bulbul from Green University is participating in that competition. Now the final round is ongoing. Current position of Bulbul in the race is third. The race is now in exciting for every participant and supporters because Bulbul is not so far from second positioned participant. At that moment Bulbul just crossed the participant who is in second position. Now you just have to print the current position of Bulbul if he is First, Second or Third.

Input

No input needed

Output

The Current position of Bulbul. Print “First”, “Second” or “Third” without quotation as output.

Problem Setter:
Md. Gulzar Hussain

B: Count Positive

Time limit: 3sec, Memory Limit: 2MB

Boltu is just admitted to class one. His math teacher gave him a homework to find out the total number of positive numbers from a list of some real numbers considering the numbers in the left side of 0 on number line as the negative number. Now as he is weak in math he asked you to do his homework.

Input:

Input starts with an integer T (≤ 10), denoting the number of test cases. Then an integer N (0<N<30) denoting the number of the numbers in the list given by boltu's teacher. Next line contains N space separated real numbers. The numbers can be between -100 to 100.

Output:

For each case, you have to print the case number and the number of positive numbers in the list.

Sample Inputs:

3
5
-8 8 5 1 -4
8
5 -4 -7 -1 2 5 4 3
2
-9 9

Sample Outputs:

Case 1: 3
Case 2: 5
Case 3: 1

Problem Setter:
Md. Gulzar Hussain

C: Mirror Reading

Time limit: 3sec, Memory Limit: 32MB

In Dhaka city a new rule is made by traffic police that every Transportations must write there service name in front of them. Now that arises a problem that others see the service name in reverse order. A solution is found that the service name must write in reverse order in the font of the transportations. Now you have to write a program to reverse the service name of the transportations.

Input:

Input starts with an integer T (≤ 30), denoting the number of test cases.

Each case starts with a string S, the length of S is 1 to 100.

Output:

For each case, you have to print the case number and the service name should write in the front of the transportation.

Sample Inputs:

3
Himachal
Hanif
Ena

Sample Outputs:

Case 1: lahcamiH
Case 2: finaH
Case 3: anE

Problem Setter:
Md. Gulzar Hussain

D: Solving Sudoku

Time Limit: 2 sec

Problem

Sudoku is one of the most popular puzzle games of all time. In a 3×3 grid of Sudoku there will be unique placement of digit from 1-9. You have to find out the missing digit in a given 3×3 grid.

9	3	2
1	8	7
?	4	5

Input

Input will consist of several test cases. Each input consists of an integer T, denoting test cases. Next T test case follows 8 numbers, which are the solved digit in the grid.

Output

Output consists of a single line with of Case #, where # is the test case number and prints missing digit. Few comprehensive example of given input and output are given below.

Input	Output
3 1 5 4 3 8 2 7 9 1 5 4 3 8 2 7 6 7 4 5 9 1 3 8 6	Case 1: 6 Case 2: 9 Case 3: 2

Problem Setter:

Misbah Ul Hoque
Senior Lecturer
Department of Computer Science and Engineering
Green University of Bangladesh

E: VO or VE

Time Limit: 2 sec

Problem

Count the number of vowel in a string and print
VO, if number of vowel is odd
VE, if number of vowel is even AND
LOL, if number of vowel is not odd or even.

Input

Input will consist of several test cases. Each input consists of an integer T, denoting test cases. Next T test case follows T strings.

Output

Output consists of a single line with of Case #, where # is the test case number and prints VO, VE or LOL as discussed above. Few comprehensive example of given input and output are given below.

Input	Output
3 GUB Moon Members	Case 1: VO Case 2: VE Case 3: VE

Problem Setter:

Misbah Ul Hoque
Senior Lecturer
Department of Computer Science and Engineering
Green University of Bangladesh

F: Sum & Sub

Time limit: 3 sec, Memory Limit: 5 MB

Description

2 brothers are going in a shop. They buy many things as they want. After finishing their marketing they thought that one of them are paid much then the other. So, they decide, 1st of all they have to add the whole amount that they brought together. Then they divide the amount that one have to pay.

If one pay much than other, then he must be back the extra amount to another.

Input

Take a Test case **T, (T<=10)**. Then take two Input **A, B (A, B>0 and A, B<2^32)**;

Output

Output **"Case Z: X Y"** without quotation where **X** is cost per head and **Y** is return amount for him who gave much money.

Sample Input	**Sample Output**
2 8 3 7 2	Case 1: 5.500 2.5000 Case 2: 4.500 2.5000

Problem Setter

Zeseya Sharmin
President of GUCC
1402 Batch
Dept. of CSE

G: Exam Paper

Time limit: 3 sec, Memory Limit: 5 MB

Alex is 19 years old. He live in a small village near codepur. This village has a specialty that they always try do everything automatically. Some strange features are available here. **Shop without Shopkeeper** is one of them. Everyone come, buy their accessories and pay cash in a vending machine. No hassle! So everyone is happy in this village.

A big problem arrive when some people didn't do their job properly. Alex younger brother Jony fail last time in math. Because teacher examined his exam paper automatically. But there must be some bug. But the teacher refused to share his code with anyone. Alex want to re-examine the exam paper. As I told, everyone is used to automation, So Alex want a program that will examine the exam paper and compare with the given mark. Alex is not that friendly with coding, so he asked you to help. Will you help him?

Input:

Every line will have a mathematical expression using +,-,*,/. Format is given below

Number1 (+,-,*,/) Number2 = Result

The line starts with "Mark" denote mark of above expressions. Every correct answer make 1 mark and Wrong answer doesn't carry any. Line with "End" will terminate execution.

Output:

For every exam sheet you have to print an output "Sheet n: Yes" or "Sheet n: No, he/she got x mark(s)" here n is the sheet number and x is the number he got (calculated mark and give mark not same). If the given mark and calculated mark are same you should say "Yes"

Sample input and output will make yourself more clear.

Sample Input	Sample Output
5 + 5 = 10 1 - 0 = 1 0 + 10 = 10 Mark 3 1 + 1 = 1 2 + 1 = 3 Mark 2 End	Sheet 1: Yes Sheet 2: No, he/she got 1 mark(s)

Problem Setter

Sabbir Ahmed