A: A Tricky Question

Time limit: 1 sec Memory Limit: 1 MB

There is a man named Mokbul. He is lazy and likes to eat more than other people. He can eat total 10 apples or 12 banana one after one when he is hungry. Now a journalist asked him that how many apple or banana he can eat when he is in empty stomach. Now he asked you to tell the journalist to answer this question. You just need to print how many apple or banana Mokbul can eat when he is in empty stomach.

Input

No input needed

Output

Print how many apple or banana Mokbul can eat when he is in empty stomach.

Problem Setter:
Md. Gulzar Hussain

B: Missing Sudoku Digit

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	?	?
1	?	?
?	4	5

Input

Input will consist of several test cases. Each input consists of an integer T, denoting test cases. Each test case starts with an integer N (0<=N<=9), denotes the number of solved digit of a grid. Next following N digits 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 digits in ascending order. If there is no missing digit in the grid then print a **"No Missing"** message. Few comprehensive example of given input and output are given below.

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

Problem Setter:

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C: Mitobayei Motin

Time limit: 2 sec, Memory Limit: 3 MB

Motin is an economical person. He always try to make profit everywhere. Now he is in a restaurant. In the menu list of the restaurant price and energy/100gm of a food item is given. Now as Motin is an economical person he would like to order the food item with minimum price with maximum energy. Your task is to help him to order food.

Input:

Input starts with an integer T (≤ 50), denoting the number of test cases. Then each contains an integer N (1<=N<=100), number of food item available in the restaurant. Next N lines will contain two numbers P (price) and E (energy/100gm) separated by a space. (1<=P, E<=1000)

Output:

For each case, you have to print case number starting from 1 and the minimum price and maximum energy of that item separated by a space. Please see sample input/output for better understanding.

Sample Inputs:	Sample Outputs:
2 3 10 12 10 13 20 200 4 2 5 3 6 3 4 8 99	Case 1: 10 13 Case 2: 2 5

Problem Setter:
Md. Gulzar Hussain

D: To Ternary

Time Limit: 2 sec Memory Limit: 3 MB

You will be given a decimal number. You will have to convert it to its ternary (Base 3) equivalent.

Input

The input file contains at most 100 lines of inputs. Each line contains a non-negative decimal integer N (N < 1000000001). Input is terminated by a line containing a negative value. This line should not be processed.

Output

For each line of input produce one line of output. This line contains the ternary equivalent of decimal value N.

Sample Input	Sample Output
10 100 1000 -1	101 10201 1101001

Problem Setter:

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E: Division By 3

Time limit: 3 sec, Memory Limit: 3MB

This is a simple ask for you. An integer will be given to you. You have to tell if the number is divisible by 3 or not, that's all☺.

Input:

Input starts with an integer T (≤ 10), denoting the number of test cases.

Each contains an integer N ($-10^{51}<N<10^{51}$).

Output:

For each case, you have to print Case #: Yes or No, here # is the case number and Yes if N is divisible by 3, No if N is not divisible by 3. See sample input output for better understanding.

Sample Inputs:

3
9
8
-9

Sample Outputs:

Case 1: Yes
Case 2: No
Case 3: Yes

Problem Setter:
Md. Gulzar Hussain

F: You can be a mobile!

Now, all of us have a mobile phone. When we send a SMS to another mobile phone, we use the button to write the SMS. In this problem you are given a special mobile phone. Where you have to write a sentence with clicking several time some specific button as follow,

Key Stroke	Letter	Key Stroke	Letter	Key Stroke	Letter	Key Stroke	Letter
2	A	444	I	77	Q	999	Y
22	B	5	J	777	R	9999	Z
222	C	55	K	7777	S	Otherwise	?
3	D	555	L	8	T	One Star(*)	Lowercase
33	E	6	M	88	U		
333	F	66	N	888	V	No Star( )	Uppercase
4	G	666	O	9	W		
44	H	7	P	99	X		

NB: Here *2.22.*3=aBc and *1.1.*3=??c

Input

Input will consist of several test cases. Each input consists of an integer T, denoting test cases. Then for each test case given the key stroke separated by dot (.) and preceding or not preceding by star (*).

Output

Output consist of a single line consist of Case #:, where # is the test case number and the key stroke corresponding word.

Input	Output
3 9.*44.*999.1 *4.666.666.*3 6.*2.3	Case 1: Why? Case 2: gOOd Case 3: MaD

Problem Setter:

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