Problem A. Built with Qinghuai and Ari Factor

Description

DISCLAIMER: All names, incidents, characters and places appearing in this problem are fictitious. Any resemblance to actual events or locales or real persons, living or dead, is purely coincidental.

Shamatisan is a somewhat famous smartphone maker in China, they built smartphones that hope to contend with Abble and Dami for the hearts, minds and the wallets of China's consumers. They have a famous advertising word, saying that Shamatisan phones are built with Qinghuai (a concept which is hard to explain in English). Their latest phone T^{-1} has just began taking reservations recently, or to be precious, at the beginning of this month. But those who are tracking its progress on Aripapapa's online store Skyat noticed an interesting fact that has led to an apology by the online shopping site.

Those (being like sleuths in this story) who are always curious about questions like "In how many attoseconds[1] were the Dami phones sold out?" found something unusual about the reservation count of Shamatisan T^{-1}. It always has a divisor three! What's the logic behind this mystery? A bit of digging into the site coding showed that the number of reservations had been multipled by three. After this discovery, people started rumors like "Three is the Qinghuai factor, applied broadly by Shamatisan internally." and began to call integers, which are divisible by three, Qinghuai numbers. They also defined if all elements in a sequence are Qinghuai numbers, the sequence itself is said to be built with Qinghuai. Moreover, after some research, people found that there is a feature called "Buy Buy Buy Ring" on Skyat, causing all reservation counts multiplied by a factor (possibly 1). The rumor "Any real number can be represented as an Aripapapa Factor (also known as Ari Factor)" had been spread widely.

Later, an Aripapapa's spokeswoman said this was an incident and posted an official apology announcement. It is said that a programmer "made a highly unscientific decision". As a result, main programmer of Skyat whose name is Beiguoxia lost his job.

Our protagonist Pike loves to write programs that are able to automatically grab some data from Internet. As you may already know, such programs are usually called "spider".

Pike has already collected some sequence using his spider. Now he wonders that if these sequences are built with Qinghuai. Help Pike to figure out this!

Input

The first line of the input gives the number of test cases, T. T test cases follow.

For each test case, the first line contains an integer n ($1 \leq n \leq 100$), the length of sequence S. The second line contains n integers, which represent n integers in sequence S. All the numbers in the input will not exceed 10^6.

[1] 1 attosecond equals to 10^{-18} seconds.

Output

For each test case output one line "Case #x: y", where x is the case number (starting from 1) and y is "Yes" (without quotes) if the sequence S is built with so-called "Qinghuai", otherwise "No" (without quotes).

Samples

Sample Input	Sample Output
2 3 1 2 3 2 3000 996	Case #1: No Case #2: Yes

Hints

In the first case, since the sequence contains numbers which are too small to have Qinghuai, it cannot be called being built with Qinghuai.

In the second case, the first integer is the signage of Shamatisan, and the second integer represents core values of Aripapapa, we can declare that the sequence is built with Qinghuai.

Also note that the whole problem statement (including hints) had deliberately been written as a joke, don't be so serious!