Problem 1 – Stuck Numbers

You are given **n numbers**. Write a program to find among these numbers all sets of 4 numbers {**a**, **b**, **c**, **d**}, such that **a**|**b** == **c**|**d**, where **a** ≠ **b** ≠ **c** ≠ **d**. Assume that "**a**|**b**" means to append the number **b** after **a**. We call these numbers {**a**, **b**, **c**, **d**} **stuck numbers**: if we append **a** and **b**, we get the same result like if we append **c** and **d**. Note that the numbers **a**, **b**, **c** and **d** should be distinct (**a** ≠ **b** ≠ **c** ≠ **d**).

Input

The input comes from the console. The first line holds the **count n**. The next line holds **n integer numbers**, separated by a space. The input numbers will be **distinct** (no duplicates are allowed).

The input data will always be valid and in the format described. There is no need to check it explicitly.

Output

Print at the console all **stuck numbers** {**a**, **b**, **c**, **d**} found in the input sequence in format "**a**|**b**==**c**|**d**" (without any spaces), each at a separate line. The **order** of the output lines **is not important**. Print "**No**" in case no stuck numbers exist among the input sequence of numbers.

Constraints

- The **count n** will be an integer number in the range [1…50].
- The input **numbers** will be **distinct** integers in the range [0…9999].
- Time limit: 0.5 sec. Memory limit: 16 MB.

Examples

Input	Output
5 2 51 1 75 25	2|51==25|1 25|1==2|51

Input	Output
7 2 22 23 32 322 222 5	2|322==23|22 23|22==2|322 32|22==322|2 32|222==322|22 322|2==32|22 322|22==32|222

Input	Output
3 5 1 20	No