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## 12. Vowels

**Program Name: Vowels.java**

**Input File: vowels.dat**

There are many words that contain all of the vowels, A, E, I, O, and U exactly once. There are fewer words that contain all of the vowels exactly once and the vowels appear in alphabetical order.

For example, SEQUOIA is a word that contains all five vowels exactly once. FACETIOUS is a word contains all five vowels exactly once and the vowels appear in alphabetical order. BUTTERFLY is a word that does not contain all five vowels.

You are to write a program that will determine

- Whether all of the vowels appear in a given word exactly once.
- Whether all of the vowels appear in a given word exactly once and they appear in alphabetical order.
- Which vowels are missing if all of the vowels do not appear in the given word.

**Note:** All words to be tested will have at most one occurrence of any vowel.

### Input

The first line of input will contain a single integer  $n$  that indicates the number of words to follow. The next  $n$  lines will each contain a single word in all caps.

### Output

For each word, print one of the following:

- ALL, IN ORDER if all five vowels appear in alphabetical order
- ALL, NOT IN ORDER if all five vowels appear but are not in alphabetical order, or
- DOES NOT CONTAIN  $x\ y\ \dots$  where  $x, y$ , etc. are the missing vowels, in alphabetical order and separated by a space, that do not appear in the word.

### Example Input File

```
4
SEQUOIA
FACETIOUS
UNIVERSAL
BUTTERFLY
```

### Example Output to Screen

```
ALL, NOT IN ORDER
ALL, IN ORDER
DOES NOT CONTAIN O
DOES NOT CONTAIN A I O
```