No Prefix Set

Given N strings. Each string contains only lowercase letters from $a - j$(both inclusive). The set of N strings is said to be **GOOD SET** if no string is **prefix** of another string else, it is **BAD SET**. (If two strings are identical, they are considered prefixes of each other.)

For example, *aab*, *abcde*, *aabcd* is **BAD SET** because *aab* is prefix of *aabcd*.

Print **GOOD SET** if it satisfies the problem requirement.
Else, print **BAD SET** and the first string for which the condition fails.

Input Format
First line contains N, the number of strings in the set.
Then next N lines follow, where i^{th} line contains i^{th} string.

Constraints
$1 \leq N \leq 10^5$
$1 \leq$ Length of the string ≤ 60

Output Format
Output `GOOD SET` if the set is valid.
Else, output `BAD SET` followed by the first string for which the condition fails.

Sample Input00

```
7
aab
defgab
abcde
aabcde
cedaaa
bbbbbbbbbb
jabjjjad
```

Sample Output00

```
BAD SET
aabcde
```

Sample Input01

```
4
aab
aac
aacghgh
aabghgh
```

Sample Output01

```
BAD SET
aacghgh
```

Explanation
aab is prefix of **aabcde**. So set is **BAD SET** and it fails at string **aabcde**.