

# Problem F

## Dominant Strings

**Input:** standard input  
**Output:** standard output  
**Time Limit:** 2 seconds

Given two strings  $s_1$  and  $s_2$ , we say that  $s_1$  *dominates*  $s_2$  if the (multi)set of characters in  $s_1$  is a proper superset of the (multi)set of characters in  $s_2$ . For instance, "acmicpc" dominates "camp", but it does not dominate "chimp" or "macpac". For a set  $S$  of strings, we call the strings in  $S$  which are not dominated by any string in  $S$  the *dominant strings* of  $S$  (even if they do not dominate any strings in  $S$ ).

Now, your task is simply to find all the dominant strings of a set of strings.

### Input

The input contains a single set of strings, with one string per line. Each string consists of at least one and at most ten lower-case alphabetic characters. There will be at most 15000 strings, and no two strings will be identical. Input is terminated by end-of-file.

### Output

Output consists of all dominant strings in the input set, in alphabetical order, one word per line.

### Sample Input

```
acmicpc
cccp
macpac
chimp
camp
```

### Output for Sample Input

```
acmicpc
chimp
macpac
```

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