Your task is to write a program that reads a sequence of words and prints, for each word, all the other words of the sequence contained in it.

Your program has to implement and use the function

```c
bool contains(string s1, string s2);
```

that returns if the word `s1` contains the word `s2` under the precondition that the length of `s1` is greater or equal than the length of `s2`.

For instance, `contains ("enlightenment", "light")`, `contains ("enlightenment", "enlightenment
)` and `contains ("enlightenment", "ten")` have to return `true`, but, however, `contains ("enlightenment", "lighten")` and `contains ("enlightenment", "might")` have to return `false`.

**Input**

Input consists in a natural number `n` followed by `n` different words `p_1, \ldots, p_n`.

**Output**

The program has to print a line for each `p_i, \ldots, p_n` in this order. Each line starts with `p_i` followed by the symbol `:` and the list of all the input words contained in `p_i` in the same order than the input. Notice that the list corresponding to each `p_i` always includes `p_i`, since every word contains itself.

**Sample input**

```
9
lighten
in
o
en
building
light
build
enlightenment
world
```

**Sample output**

```
lighten: lighten en light
in: in
o: o
en: en
building: in building build
light: light
build: build
enlightenment: lighten en light enlightenment
world: o world
```