2069   Birds of a feather should not play together

A group of ACMers designed a variation, and a much simpler one at that, of the popular game TARGET to help them relax while waiting for the judges' declaration of the final scores. The game consists of finding words that satisfy certain criterion (e.g., start with "dog" ("dogma") or contain "cat" ("scatological"), used in the news today ("nuclear"), etc.

For this game the group agreed that longer words are more worthy than short words and unusual words are better than common words, where commonness is defined as the number of participants who all think of the same word. The score for a word is calculated as its number of letters divided by the number of participants choosing it. Examples are: the word "direkt" chosen by a single German participant scores "6" points for her, and the word "directly" chosen by three participants scores only "8/3" for each of them. The total score for each participant is the sum of his/her individual word scores.

The group has also set some rules for the game:

1. the number of participants to be between two (2) and nine (9),

2. the number of words chosen by a participant to have a maximum of nine (9) words,

3. each of the words, which naturally has at least one letter, to have a maximum of twenty (20) letters, and

4. the length of the name that a participant chooses for himself/herself to be between one (1) and ten (10) letters.

Your task is to write a program that processes several lists of words, one for each participant, and determines the winner. You do not have to worry about checking the validity of the words against the criterion. The participants will perform this task as part of learning new and foreign words.

Input

Input for this problem consists of a sequence of one or more rounds of the game. Each round is described by several lines as follows:

- The first line consists of a single integer, N, $1 < N < 10$; that describes the number of participants.

- Each of the following N lines starts with the name of a participant followed after a single space by a list of words, separated by a single space. The input will be terminated by a line that consists of a single zero (0). This line should not be processed.

Output

For each round, the output consists of two lines. The first line contains the round number starting with 1 as shown in the Sample Output below. The second line contains the names of participants with the highest score in this round, separated by a single space. The names must appear in the same order as they appear in the input.

Sample Input

```
4
John dire direct direction
Jane direkt
Joan direction
Janet vondire direction
2
john great admired politician
Kim great loss poorer
2
peter moral choice
paul moral choice
0
```

Sample Output

```
Round 1
John
Round 2
john
Round 3
peter paul
```