# Problem 2—Quiz Grader

Professor Plum has some funny ideas about teaching. One is his quirky quiz scoring since he believes that answering two or more questions correctly in a row should be worth more points than answering the same questions correctly (but not consecutively). When he hand-grades quizzes, he places an X or O (meaning incorrect and correct, respectively) by each question to generate a string of X's and O's that's the same length as the number of questions on the quiz. He computes the total score using the simple rule: the $n^{th}$ correct answer in a row is worth n points. Thus, "XOXXXXOOOX" is worth 1 + 1 + 2 + 3 = 7 points.

He wants you to write a program to grade a set of quizzes using the above grading scheme.

## Input Format

The first line contains a positive integer *n* specifying the number of quizzes to grade. The next line contains a string of upper-case letters A-H corresponding to the correct answers of the multiple-choice quiz. The following *n* lines contain a student's name terminated by a colon (":") followed by strings of letters A-H corresponding to the student's multiple-choice quiz answers. All the strings for the key and student answers are the same length.

## Output Format

The output will consist of *n* lines containing each student's name in all upper-case, a space, and their quiz score using Professor Plum's above grading scheme. The order of the output lines must be alphabetically (ascending order) by last name with the first name being the used secondarily.

**Input Sample**

```
5
ADECCAHBBH
Sally Smith:ADECCAHBBH
Jane Doe:ADBCCAHAAA
Tom Jones:GGGGGGGGGG
John Smith:BDECGAHCBG
BILLY SMITH:BDFCDAEBCH
```

**Output Sample**

```
JANE DOE 13
TOM JONES 0
BILLY SMITH 5
JOHN SMITH 10
SALLY SMITH 55
```