Problem 1—The Sing Off

Nyota Uhura is involved in a singing competition. The rules of this competition are as follows. Each singer sings three songs: one fast song, one slow song, and one disco medley. Each song is graded out of 100 points, for a maximum score of 300 points. Each song is also timed, and there is a penalty if the total time exceeds twelve minutes. If a singer goes over the twelve-minute requirement, even by as little as one second, her final ranking will be one lower than what she would otherwise have earned.

Well, actually, that rule can't always apply. For example, if the person in last place were to exceed the time limit, she can't be reduced in rank because she is already in last place. Along these lines, no person who kept to the time limit is allowed to rise more than one level as a result of someone going over. As a result, sometimes the penalty can't be imposed, since it would result in someone else rising more than one rank. Similarly, the penalty will never be construed to lower any offender more than one rank.

Given a list of names, scores and times, you are to print the ranking of the singers. There will be no ties.

INPUT SPECIFICATION. You will be given a set of input cases. Each case will consist of several (less than 100) lines of information pertaining to the competitors, their names, and their scores and times (in seconds) on the three songs. Giving a full specification of the input lines would be pointless; just follow the sample. Note that there may be spaces in the name, but there will never be two consecutive spaces in a line. Also, the name will not exceed 20 characters, will not contain a colon character, or contain any other dirty tricks. All numbers will be nonnegative integers. The fields will always be in the order given here.

Each input case will be followed by **<EOLN>**. An extra **<EOLN>** will follow the last case.

OUTPUT SPECIFICATION. The output cases should appear in the same order as the input cases. Each output case will be of the form "Case *c*:" followed by two **<EOLN>**'s. What will then follow a series of lines organized into fields: rank, name, total score, total time. The three numeric fields will have a field width of 3 and be right justified. The name will have a field width of 20 and be left-justified. The fields will be separated by exactly one space and each line will be followed by **<EOLN>**. An extra **<EOLN>** will follow each output case.

SAMPLE INPUT.

Name: ·Uhura, ·Nyota ·S1: ·95 ·T1: ·300 ·S2: ·97 ·T2: ·300 ·S3: ·100 ·T3: ·150 <EOLN>
Name: ·Spock, ·Mr . ·S1: ·90 ·T1: ·100 ·S2: ·85 ·T2: ·200 ·S3: ·85 ·T3: ·300 <EOLN>
Name: ·Kirk, ·James ·T. ·S1: ·40 ·T1: ·30 ·S2: ·30 ·T2: ·30 ·S3: ·50 ·T3: ·90 <EOLN>
<EOLN>
Name: ·Uhura, ·Nyota ·S1: ·95 ·T1: ·300 ·S2: ·97 ·T2: ·300 ·S3: ·100 ·T3: ·150 <EOLN>
Name: ·Spock, ·Mr . ·S1: ·90 ·T1: ·100 ·S2: ·85 ·T2: ·200 ·S3: ·100 ·T3: ·150 <EOLN>
Name: ·Spock, ·Mr . ·S1: ·90 ·T1: ·100 ·S2: ·85 ·T2: ·200 ·S3: ·100 ·T3: ·150 <EOLN>
Name: ·Spock, ·Mr . ·S1: ·90 ·T1: ·100 ·S2: ·85 ·T2: ·200 ·S3: ·100 ·T3: ·150 <EOLN>
Name: ·Kirk, ·James ·T. ·S1: ·40 ·T1: ·30 ·S2: ·30 ·T2: ·30 ·S3: ·50 ·T3: ·90 <EOLN>
Name: ·Mudd, ·Harry ·S1: ·5 ·T1: ·300 ·S2: ·5 ·T2: ·300 ·S3: ·5 ·T3: ·300 <EOLN>
<EOLN>
<EOLN>
<EOLN>

SAMPLE OUTPUT.