# Graduation

As required by the training program, students must earn at least m credits to graduate(each course with a score of 50 or more will be calculated 4 credits). You are assigned to write a software to process and print a list of students eligible to graduate.

## Input

The first line contains the number of students (denoted by n) and the minimum number of credits ($n \leq 10^6$, $m \leq 250$).

The i-th line in the next n lines shows the information of the ith student: student ID, student name, number of course $p_i$ and $p_i$ integers representing highest grade in $p_i^{th}$ course ($0 \leq p_i \leq 100$).

Student ID is an integer contains no more than 10 digits; Student names include the lowercase letters and not more than 20 characters.

## Output

For each student, output the student ID, student name and grade point average (only for the passed courses) separated by a space. Students are sorted in descending average score. If two students have equal GPA, the student output with the smaller student ID ifirst.

The average is rounded down to the unit.

## Example

**Input:**
3 12
1231209122 khoa 5 45 60 50 80 40
1231209123 van 3 50 55 60
1231209124 my 3 45 60 100

**Output:**
1231209122 khoa 63
1231209123 van 55