GPA

Give a list of students and their grades. For each student, calculate the average cumulative score. Please note that student need to get at least 50 points to pass a course.

Input

- + Number of students in the list N (1 <= N <= 10^5)
- + Each student include:
 - Student's name (a string of up to 20 characters, containing no spaces)
 - The number of course student's finished (0 <= C <= 100)
 - The scores for all courses (0 <= ci <= 100)

Output

For each student, print out the student's name, the courses which student passed in the order they were entered, and the average cumulative score (taken whole number). If no subject meets the requirements, output 0 after the name.

Example

Input:

3 An 3 20 50 70 Binh 5 70 10 30 20 80 Cuong 1 100

Output:

An 50 70 60 Binh 70 80 75 Cuong 100 100