Best Two

In University of Wonderland students have to face 3 quizzes in each term. The average marks of the best two quizzes is counted in the final grade. If any student gets less than 10 marks in two or more quizzes, he/she gets an F. As you are a computer science student, your teacher asked you to write a program to process quiz marks of his class.

Input

The first line of the input contains an integer N (1 <= N <= 1000) number of students. N lines follow. Each line contains three numbers qi1 qi2 qi3 (0 <= qi1, qi2, qi3 <= 20) marks of the quizzes of the ith student. Quiz marks can have fractional value.

Output

Output one line for every student. Output "**Failed**" if the ith student gets less than 10 marks in two or more quizzes otherwise output the average mark of the best two quizzes with exactly 2 digits after decimal point.

Example

Input: 2 15.75 18 20 5 15 7.5

Output:

19.00 Failed