Maximum Average Pass Ratio

There is a school that has classes of students and each class will be having a final exam. You are given a 2D integer array classes, where classes[i] = [$pass_i$, $total_i$]. You know beforehand that in the i^{th} class, there are $total_i$ total students, but only $pass_i$ number of students will pass the exam.

You are also given an integer extraStudents. There are another extraStudents brilliant students that are **guaranteed** to pass the exam of any class they are assigned to. You want to assign each of the extraStudents students to a class in a way that **maximizes** the **average** pass ratio across **all** the classes.

The **pass ratio** of a class is equal to the number of students of the class that will pass the exam divided by the total number of students of the class. The **average pass ratio** is the sum of pass ratios of all the classes divided by the number of the classes.

Return *the **maximum** possible average pass ratio after assigning the* extraStudents *students.* Answers within 10^{-5} of the actual answer will be accepted.

Example 1:

Input: classes = [[1,2],[3,5],[2,2]], extraStudents = 2

Output: 0.78333

Explanation: You can assign the two extra students to the first class. The average pass ratio will be equal to (3/4 + 3/5 + 2/2) / 3 = 0.78333.

Example 2:

Input: classes = [[2,4],[3,9],[4,5],[2,10]], extraStudents = 4

Output: 0.53485

Constraints:

- 1 <= classes.length <= 10^5
- classes[i].length == 2
- 1 <= $pass_i$ <= $total_i$ <= 10^5
- 1 <= extraStudents <= 10^5