

HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

STEP 1 STEP 2 STEP 3 STEP 4 STEP 5 | THEORY PRACTICE | SUBMIT SUBMISSIONS HACKS STANDINGS CUSTOM INVOCATION ITMO Academy: pilot course » Binary Search » Step 3 » Practice

A. Get together

time limit per test: 1 second
memory limit per test: 256 megabytes input: standard input output: standard output

There are n people on a straight line, they need to gather at one point. Each person knows his current position x_i and his speed v_i . Help them find out in what minimum time they can gather at one point.

Input

The first line contains integer n ($1 \le n \le 10^5$), next n lines contain pairs of integers x_i and v_i ($-10^9 \le x_i \le 10^9$, $1 \le v_i \le 10^9$).

Output

Print one number, the minimum time it takes people to gather at one point. The answer will be considered correct if the relative or absolute error does not exceed 10^{-6} .

Example

input	Сору
5	
-1 5	
10 3	
4 2	
7 10	
8 1	
output	Сору
1.5	

Codeforces (c) Copyright 2010-2024 Mike Mirzayanov The only programming contests Web 2.0 platform Server time: Jun/29/2024 13:50:39 (l1). Desktop version, switch to mobile version.

Privacy Policy

Supported by





