Four Numbers

Input file:	standard input
Output file:	standard output
Time limit:	2 seconds
Memory limit:	64 megabytes

This problem is simple. You are given an array of distinct numbers: $\{a_1, a_2, \ldots a_n\}$. Chose four distinct numbers A, B, C and D from it. Find the maximum possible value of the following –

$$\frac{A+B}{C-D}$$

Input

First line contains an integer N, the number of elements in the array. Next line will contain N integers: $a_1, a_2, \ldots, a_n$.

Output

Print the maximum possible value of the given statement. Your answer will be considered correct it is within 10^{-5} of actual answer.

Constraints

$4 \leq N \leq 1000$.

$1 \leq a_i \leq 10^8$ for all $1 \leq i \leq N$.

If $i \neq j$ then $a_i \neq a_j$.

Scoring

Subtask 1 (points: 20)

$4 \leq N \leq 50$

Subtask 2 (points: 80)

No further restrictions

Example

Sample Input	Sample Output
10 1 2 3 4 5 6 7 8 9 10	19.00000
5 22 100 42 3 86	9.789473

Explanation

First Sample: Taking $A = 9, B = 10, C = 2, D = 1$ gives the maximum value.

Second Sample: Taking $A = 100, B = 86, C = 22, D = 3$ gives the maximum value.