1   Best Buddies

In a small school on Cornwall village, the students are playing a game where a few roll numbers are pooled and determine which pair or pairs of hall tickets numbers have the smallest absolute difference between them.

Example: if the pool has [5,8,9,6,7], sort it as [5,6,7,8,9] to see that several pairs have the minimum difference of 1:[(5,6),(6,7),(7,8),(8,9) . The return array would be [5,6,6,7,7,8,8,9]

Given a list of unsorted integers, bb , find the pair of elements that have the smallest absolute difference between them. If there are multiple pairs, find them all.

Input Format

The first line contains a single integer , the length .
The second line contains space-separated integers, .

Output Format

Output the pairs of elements with the smallest difference. If there are multiple pairs, output all of them in ascending order, all on the same line with just a single space between each pair of numbers. A number may be part of two pairs when paired with its predecessor and its successor.

Input/Output

Input	Output	Comments
5 5 8 9 6 7	5 6 6 7 7 8 8 9	**Input :** The first line contains a single integer , the length The second line contains space-separated integers **Explanation:** minimum difference of 1 6-5 = 1, 7-6=1, 8-7=1, 9-8 = 1 Pairs with smallest difference [(5,6),(6,7),(7,8),(8,9)] The return values would be **[5,6,6,7,7,8,8,9]** **Hence output is 5 6 6 7 7 8 8 9**
5 20 25 -15 -10 5	-15 -10 20 25	**Explanation:** minimum difference of 5 (25) - (20) = 5 & (-10) - (-15) = 5 Pairs with smallest difference [(-15,-10),(20,25)] **Hence output is -15 -10 20 25**

Children's Day Celebrations

Every year on the 14th of November, all schools celebrate Children's Day. In a district, there are several schools (N) . The DEO has ordered N packets with random number of chocolates in them.

He gave the following instructions:

1) Each student MUST get one chocolate.

2) Each school would get a packet of chocolates. The number of chocolates would be more than or equal to the number of students of that school.

3) Head Masters of school can take/retain the chocolates that remained after distribution.

4) ALL students of ALL schools MUST get one chocolate each.

With the given number of packets and schools, he is not sure if all the packets would be sufficient enough to get every student chocolate a piece.

Now, given the number of students in N number of schools and number of chocolates in each of the N packets, write a program to determine if all students of all schools would get chocolates then return **yes** otherwise **no**

Input Format

First line contains the number of schools - N.

Second line contains N integers, corresponding to number of chocolates in each packet.

Third line contains N integers, corresponding to the number of students in each school.

Output Format

Print a single line containing Yes or No .

If Input Constraints did not meet, print -1 as output

Input Constraint   1 < S <10

Input/Output

Input	Output	Comments
5	**yes**	Line 1: Number of schools
85 65 74 98 92		Line 2: Number of chocolates in each packet

60 70 91 83 95		Line 3: Number of students in each school **Explanation** Compare the packets and school strengths (students) as follows and print output 65 74 85 92 98 60 70 83 91 95 65>60,74>70,85>83,92>91,98>95**--> all students of all school would get one chocolate each** Hence output = **yes**
4 85 65 74 98 60 90 80 95	**no**	**Explanation** Compare the packets and school strengths (students) as follows and print output 65 74 98 85 60 80 90 95 65>60,**74>80**,85>80,98>95 --> one school would not get enough chocolates Hence output = **no**
15	**-1**	**Explanation** Not fulfilling **Constraint**