Problem A. Colorful Transceivers

Time limit 2000 ms **Mem limit** 1048576 kB

Problem Statement

Three people, A, B and C, are trying to communicate using transceivers. They are standing along a number line, and the coordinates of A, B and C are a, b and c (in meters), respectively. Two people can directly communicate when the distance between them is at most d meters. Determine if A and C can communicate, either directly or indirectly. Here, A and C can indirectly communicate when A and B can directly communicate and also B and C can directly communicate.

Constraints

- $1 \le a, b, c \le 100$
- $1 \le d \le 100$
- All values in input are integers.

Input

Input is given from Standard Input in the following format:

a b c d

Output

If A and C can communicate, print Yes; if they cannot, print No.

Sample 1

Input	Output
4 7 9 3	Yes

A and B can directly communicate, and also B and C can directly communicate, so we should print Yes.

Sample 2

Input	Output
100 10 1 2	No

They cannot communicate in this case.

TEP 2023.1 - Lista 01 Apr 01, 2023

Sample 3

Input	Output
10 10 10 1	Yes

There can be multiple people at the same position.

Sample 4

Input	Output
1 100 2 10	Yes