

Problem A

Amazing Sushi

Time limit: 1 second

Mary and Marty were playing with their Marvelous Marble Machine and have become hungry. So, they decided to order some sushi. There are several types of sushi. The sushi platter comes with pieces of various types (possibly many of each type).

Both Mary and Marty know a range of the total number of pieces of sushi they can eat. They would like to know if there is a way to distribute their sushi such that neither of them eats too little or too much sushi and no sushi goes uneaten. To be fair, Mary and Marty each want to eat half of the pieces of each type. If there is an odd number of pieces for a given type, either one of them can eat the extra piece.



Does there exist a way for Mary and Marty to properly distribute their sushi?

Input

The first line contains a single integer n ($1 \leq n \leq 100$), which is the number of types of sushi.

The second line describes the number of pieces of sushi Mary can eat. This line contains two integers, x_1 ($0 \leq x_1 \leq 100\,000$) and y_1 ($x_1 \leq y_1 \leq 100\,000$). Mary must eat at least x_1 pieces and at most y_1 pieces.

The third line describes the number of pieces of sushi Marty can eat. This line contains two integers, x_2 ($0 \leq x_2 \leq 100\,000$) and y_2 ($x_2 \leq y_2 \leq 100\,000$). Marty must eat at least x_2 pieces and at most y_2 pieces.

The next n lines describe the n different types of sushi in Mary and Marty's platter. Each line contains a single integer m ($1 \leq m \leq 1\,000$), which is the number of pieces of sushi of this type.

Output

If there exists a way for Mary and Marty to properly distribute their sushi, display Yes. Otherwise, display No.

Sample Input 1

```
3
1 10
7 20
5
3
1
```

Sample Output 1

```
No
```

Sample Input 2

```
3
1 10
3 20
5
3
14
```

Sample Output 2

```
Yes
```

Sample Input 3

```
3
1 10
3 20
5
3
16
```

Sample Output 3

```
No
```