Problem A. Fasting and Furious

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

It is Ramadan, and Yessine is responsible of buying the groceries to his family. To buy everything he needs, he will have to visit n shops.

Initially, the value of Yessine's anger is 0. When visiting each shop, Yessine will find long queues and rude people so he will get angry, when visiting the i^{th} shop, that value will increase by A_i.

If the value of that anger will be strictly greater than his patience limit L, He will get extremely mad and start punching random people.

Yessine wants peace, he knows all the anger value of each shop, so he will avoid going out if he is going to get mad.

Find out whether Yessine is going out or not.

Input

- The first line contains two integers : with $1 \leq n \leq 4$ the number of shops, and $1 \leq L \leq 100$ Yessine's patience limit.

- The second line contains n integers $0 \leq A_1, \ldots, A_n \leq L$ representing the anger value of each shop.

Output

- Output YES if Yessine will go out, otherwise output NO.

Examples

standard input	standard output
2 20 15 7	NO
4 100 33 33 33 1	YES

Problem B. Looking For Internship

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Oussama is looking for a summer internship, and he heard that **Talan** is one of the leading tech companies, so he decided to apply there.

Since he does not know the location of the enterprise, he asked his friend Rami. Rami did not tell him where it is exactly located, but he showed him the direction and told him that it is the highest building in that street.

There are n buildings in that street numbered from 1 to n. The first building he will encounter is the building 1, the second one is the building 2, and so on... Note that Oussama will be starting just before the first building.

Oussama does not want to walk for too long. Since he knows the height of each building in that street, and that the distance between two consecutive buildings is one, he wanted to know how much he will be walking.

Help Oussama determine how much he will walk in his journey.

Input

- The first line contains one integer $1 \leq n \leq 10^6$

- The second line contains n integers $1 \leq H_1, \ldots, H_n \leq 10^{18}$.

Output

Print a single line: The distance Oussama will be walking.

Examples

standard input	standard output
5 1 10 17 3 2	3
10 3 1 4 1 5 9 2 6 5 3	6