

A. Jumps

Time limit: 2s

Memory limit: 256 MB

A frog lives in a one-dimensional world in the point with the coordinate 0. He needs to get to the point with the coordinate x . For some reason he cannot make jumps of arbitrary length, and can jump only by a_1, \dots, a_n in any direction. Is he able to reach x ?

Input

The first line contains two integers n and x separated by a space ($1 \leq n \leq 200000$, $-10^9 \leq x \leq 10^9$) — the number of variants of jump length and the coordinate of the point to reach.

The second line contains n integers a_i separated by spaces ($1 \leq a_i \leq 10^9$) — the lengths of jumps the frog can make.

Output

Output «YES» (without quotes), if the frog can reach the point x , otherwise output «NO» (without quotes).

Examples**input**

```
3 17
3 5 4
```

output

```
YES
```

input

```
4 5
10 20 30 40
```

output

```
NO
```

X Samara Regional Intercollegiate Programming Contest