



## Canteen: Check

Like often before, mouse Stofl has to stand in a long queue in the canteen (called Mensa) to get his well-deserved lunch.

He is bored and looks at his  $N$  coins and wonders whether he can pay the menu of  $M$  centimes precisely.

### Input

On the first line,  $M$  and  $N$  are given.

The second line contains  $N$  numbers  $m_i$ , the values of the coins of mouse Stofl.

### Output

Print either "YES" or "NO". Answer the question whether he can pay exactly  $M$  centimes.

### Limits

There are two test groups, each of which is worth 50 points.

- In test group 1, we have  $N \leq 20$  and all coin values are at most 20.
- In test group 2, we have  $N \leq 1000$  and all coin values are at most 1000.

### Examples

Input	Output
9 620 500 200 200 200 20 20 20 20 20	YES

Input	Output
9 670 50 100 200 500 10 200 10 200 20	YES