Problem 4: Bars

(Easy)

(Adapted from UVa 12455)

Some things grow if you put them together.

We have some metallic bars, their lengths known, and, if necessary, we want to solder some of them in order to obtain another one being exactly a given length long. No bar can be cut up. Is it possible?

Input Format

The input consists of three lines. The first line contains a number L representing the length of the bar we want to obtain. The second line contains a number N, representing the number of bars we have. The third line contains N integers separated by spaces, representing the length of the N bars.

Constraints

- $0 \leq L \leq 1000$
- $1 \leq N \leq 15$
- Every bar's length is between 1 to 1000 inclusive

The time limit for this problem is 2 seconds.

Output Format

The output should contain a single line, consisting of the string `YES` or the string `NO`, depending on whether a solution is possible or not.

Sample Input 1

```
25
4
10 12 5 7
```

Sample Output 1

```
NO
```

Sample Input 2

```
925
10
45 15 120 500 235 58 6 12 175 70
```

Sample Output 2

```
YES
```

Sample Input 3

```
0
2
13 37
```

Sample Output 3

```
YES
```