

Computer Programming (I)

Homework 3

Problem Statement

Given positive integers a_1, a_2, \dots, a_n , where $2 \leq n \leq 10$, determine whether there exists $S \subseteq \{1, 2, \dots, n\}$ satisfying

$$\sum_{i \in S} a_i = 1000.$$

Input Format

The input consists of n, a_1, a_2, \dots, a_n , with consecutive integers separated by space(s).

Output Format

Output “yes” if there exists $S \subseteq \{1, 2, \dots, n\}$ satisfying

$$\sum_{i \in S} a_i = 1000,$$

and output “no” otherwise.

Sample Input 1

5 310 56 200 2 490

Output for Sample Input 1

yes

Sample Input 2

6 310 56 250 2 490 3

Output for Sample Input 2

no

My Screenshot

```
b89053@linux1:/home/student/89/b89053/IN103> ./a.out
5 310 56 200 2 490
yes
b89053@linux1:/home/student/89/b89053/IN103> ./a.out
6 310 56 250 2 490 3
no
b89053@linux1:/home/student/89/b89053/IN103> █
```