Computer Programming (I)

Homework 3

Problem Statement

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

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

Input Format

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

Output Format

Output "yes" if there exists $S \subseteq \{1,2,\ldots,n\}$ 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