
Equal sums (3)

P11655_en

Write a program that, given a natural number s and n natural numbers x_1, \dots, x_n , prints all the subsets (maybe with repeated numbers, but using every x_i at most once) whose sum is exactly s .

Input

Input consists of a natural number s , followed by a number $n > 0$, followed by x_1, \dots, x_n .

Output

Print all the subsets whose sum is s that can be made up with x_1, \dots, x_n .

Information about the checker

You can print in any order both the solutions and the elements inside each solution.

Hint

For this exercise, a very simple algorithm can be too slow.

Sample input 1

```
6
7
1 6 0 1 3 0 2
```

Sample output 1

```
{1, 3, 2}
{1, 3, 0, 2}
{0, 1, 3, 2}
{0, 1, 3, 0, 2}
{6}
{6, 0}
{6, 0}
{6, 0, 0}
{1, 3, 2}
{1, 3, 0, 2}
{1, 0, 3, 2}
{1, 0, 3, 0, 2}
```

Sample input 2

```
10
10
1 1 1 1 1 1 1 1 1 1
```

Sample output 2

```
{1, 1, 1, 1, 1, 1, 1, 1, 1, 1}
```

Problem information

Author : Salvador Roura

Translator : Carlos Molina

Generation : 2013-09-02 14:55:40

© Jutge.org, 2006–2013.

<http://www.jutge.org>