## Problem 2 – Sum of Elements

You are given **n** numbers. Find an **element that is equal to the sum of all of the other elements**.

### Input

Input data should be read from the console.

* At the **only line** in the input a **sequence of integers** stays (numbers separated one from another by a space).

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

The output data must be printed on the console. At the only line of the output print the result.

* Print "**Yes, sum=…**" if there is an element that is equal to the sum of all other elements, along with this **sum**.
* Print "**No, diff=…**" if there is no element that is equal to the sum of all other elements. Print also the minimum possible difference between an element from the sequence and the sum of all other elements (always a **positive number**).

### Constraints

* All input numbers are integers in the range [0 … 2 000 000 000].
* The count **n** of the input integers is in the range [2 ... 1 000].
* Allowed working time for your program: 0.1 seconds.
* Allowed memory: 16 MB.

### Examples

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Input** | **Output** | **Comments** |  | **Input** | **Output** |
| 3 4 1 1 2 12 1 | Yes, sum=12 | 3 + 4 + 1 + 2 + 1 + 1 = 12 | 6 1 2 3 | Yes, sum=6 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 1 1 10 | No, diff=8 | 5 5 1 | No, diff=1 | 1 1 1 | No, diff=1 | 0 0 | Yes, sum=0 |