# Problem 3. Spyfer

Sam the spy has created a new system for tracking called “Spyfer”. But he needs you to write the software for it, because he is incompetent in programming.

You will receive a **sequence** of **integers**, on a **single input line**, **separated** by **spaces**. Those integers will represent coordinates.

Your task is to **check every integer**, if it is **equal** to the **sum** of its **DIRECT neighboring elements**. When you find an integer that follows this rule you should **REMOVE** the **neighboring elements**, and **REPEAT the process** again,from **the start**.

If you **reach** the **end** of **the sequence**, you should **terminate** the program and print **what’s left** of the numbers, **separated** by **spaces**.

### Input

* The input comes in the form of a **single input line**, containing the **integers**, **separated** by **space**.

### Output

* As output, you must print, what’s left of the sequence, after you’ve processed it.
* Print the elements, **separated** by **spaces**.

### Constrains

* The **integers** in the input will be in **range [0, 1000]**.

### Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| 1 2 1 | 2 | We find **the first element** that is **equal** to **the sum** of its **neighboring elements**. That is **2**.  So we **remove** the **neighbours** and **return** to the **start** of the **sequence**.  There is **only 1 element**, so we just pass it and reach the end of the sequence. We print what’s left of it. |
| 3 2 8 0 1 1 4 3 6 2 | 3 8 | 1st step - 3 2 8 0 1 1 4 3 6 2  2nd step - 3 2 8 1 4 3 6 2  3rd step - 3 2 8 4 6 2  4th step - 3 2 8 6  5th step - 3 8  We reach the end of the sequence and we print what’s left of it. |