Problem 3 – Hornet Assault

The hornets are preparing an assault on beehives. It takes very little amount of hornets to annihilate a beehive, but the bees are far from defenseless. You must calculate how many beehives, can the hornets annihilate, before they die.

You will be given a **sequence of integers**, separated by a **space**. The integers will represent the **beehives** and the **amount of bees** in them. You will then receive **another** sequence of integers, which will represent the **hornets**, and their **power**. The **power** indicates **how many bees** a hornet can **kill**.

The hornets must **start attacking** the beehives **one** by **one**. If the bees are **more** or **equal to** the **summed-up power** of the **hornets**, the **first** (**entered**) hornet, **currently alive**, **dies** in the assault of the **current beehive**.

When the hornets assault a beehive, they **kill** an **amount of bees**, **equal** to their **summed-up power**. This means that you must **decrease** the **integer** of the **beehive**, with the **value** of the summed-up power, of the **live hornets**.

After you've successfully assaulted all beehives, you must print the result of the **winning side**. If there are **ANY beehives** with **live bees** inside them, you must print them. If there aren't, you must print the **live hornets**.

Input

- On the first line of input you will receive a sequence of integers, separated by **spaces** – the **beehives**.
- On the second line of input you will receive a sequence of integers, separated by **spaces** – the **hornets**.

Output

- Depending on the case of printing you must either print the **live** beehives, or the **live** hornets.
- They are sequences of integers, so in both cases you must print them **separated** by a **space**.

Constrains

- The input will consist only of integers in **range [0; 1,000,000]**.
- There will be **NO STALEMATE** situations.
- The input sequences may consist of up to **3000** elements.

Examples

Input	Output	Comments
`20 10 20 30` `5 10 5 3`	`7`	The **summed power** of the **hornets** is 23. They kill the first **3 beehives**, due to overwhelming power. The last beehive has **higher value**, and its left with **7 bees alive** inside it. The **first hornet** (**5**) **dies**. All other beehives **are dead**, so we print **only this one**.
`10 20 10 15` `5 6 7`	`2 2`	The **summed power** is **18**. The first beehive dies. In the second one, 18 bees die, but due to higher power, the **first hornet** (**5**) **dies**. Now the **summed power** is **13**. The third beehive dies, but the fourth one has **higher** value. **13 bees die** from the **fourth** beehive and the **current first hornet** (**6**) **dies**. We have the **second** and the **fourth** beehive with **2 bees**, each, so we print them.
`20 100 40 45 20 10` `40 10 5 40 5`	`10 5 40 5`	

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