

Task 2 - Brick Triangles

You need to build some steps, made out of bricks! Yeah... that's pretty much it...

The steps are a **sequence of bricks**, ordered in a shape, similar to a **triangle**. Each brick triangle is being build in layers from the **top to the bottom** (as we said, we don't care about physics).

The **first layer** of the brick triangle contains only the first brick of the sequence. The **second layer** contains the second and third bricks and so on. A brick triangle of **3 layers** would look something like this:

Brick1

Brick2 Brick3

Brick4 Brick5 Brick6

The sequence of bricks begins with **three integers** (the brick heights), that can be either **positive or negative**. The height of each brick, after the third one, is calculated by the sum of the last three bricks, using the formula -> $Bh_n = Bh_{n-1} + Bh_{n-2} + Bh_{n-3}$, where **Bh** is the brick height.

So if **Brick1** has a height of 1, **Brick2** of 4 and **Brick3** of 2, the triangle would look like this:

1

4 2

7 13 22

- **Brick4's** height is calculated by $Bh_4 = Bh_{4-1} + Bh_{4-2} + Bh_{4-3}$ which results to $Bh_4 = 2 + 4 + 1 = 7$
- **Brick5's** height is calculated by $Bh_5 = Bh_{5-1} + Bh_{5-2} + Bh_{5-3}$ which results to $Bh_5 = 7 + 2 + 4 = 13$
- **Brick6's** height is calculated by $Bh_6 = Bh_{6-1} + Bh_{6-2} + Bh_{6-3}$ which results to $Bh_6 = 13 + 7 + 2 = 22$

Input

- Input will consist of an array of elements
- The first **three elements** will be the heights of the first three bricks of the brick sequence.
- The **fourth element** of the input will be the number **L** – the number of layers in the brick triangle.
- *The input will always be valid and in the described format. There is no need to validate it explicitly.*

Output

- The output should contain exactly L amount of lines.
- The first line should consist of exactly 1 number.

- The second line should consist of exactly 2 numbers, separated by a space (" ").
- The third line should consist of exactly 3 numbers, separated by a space (" ").
- And so on...

Constraints

- The number of lines is in the range [2..20] inclusive.

Submit in BGCoder.com

- You should submit a function wrapping your solution

```
function solve(args){
  // args is the input in the form of an array provided by BGCoder
  // your code goes here
}
```

Examples

Input	Output	Input	Output
1	1	1	1
4	4 2	-1	-1 1
2	7 13 22	1	1 1 3
3		4	5 9 17 31