

Adding Polynomials

Write a method that adds two polynomials. Represent them as arrays of their coefficients. Write a program that reads two polynomials and prints their sum.

Input

- On the first line you will receive the number **N**
- On the second line you will receive the first polynomial as coefficients separated by spaces
- On the third line you will receive the second polynomial as coefficients separated by spaces

Output

- Print the sum of the polynomials

Constraints

- $1 \leq N \leq 1024$
- Time limit: **0.1s**
- Memory limit: **16MB**

Sample tests

Input Output

```
3 12 4 -2
5 0 1
7 4 -3
```

Example explanation:

$$x^2 + 5 = \boxed{1}x^2 + \boxed{0}x + \boxed{5} \Rightarrow \{\boxed{5}, \boxed{0}, \boxed{1}\}$$

$$-3x^2 + 4x + 7 = \boxed{-3}x^2 + \boxed{4}x + \boxed{7} \Rightarrow \{\boxed{7}, \boxed{4}, \boxed{-3}\}$$

$$(x^2 + 5) + (-3x^2 + 4x + 7) = (-2x^2 + 4x + 12) = \boxed{-2}x^2 + \boxed{4}x + \boxed{12} \Rightarrow \{\boxed{12}, \boxed{4}, \boxed{-2}\}$$