Task:

Having a good previous year, Monk is back to teach algorithms and data structures. This year he welcomes the learners with a problem which he calls "Welcome Problem". The problem gives you two arrays *A* and *B* (each array of size *N*) and asks to print new array *C* such that:

C[i]=A[i]+B[i]

1≤i≤N

Now, Monk will proceed further when you solve this one. So, go on and solve it.

Input Format

First line consists of an integer *N*, denoting the size of *A* and *B*.

Next line consists of *N* space separated integers denoting the array *A*.

Next line consists of *N* space separated integers denoting the array *B*.

Output Format

Print *N* space separated integers denoting the array *C*.

Example 1:

Input:

5

1 2 3 4 5

4 5 3 2 10

Output:

5 7 6 6 15