

## Assignment 2 : Zero-Sum Game

There are four sequences of integers.

The value of each integer is in the between -50,000,000 and 50,000,000 inclusive.

Write a Python 3 program that finds a set of four numbers, one from each sequence, that sum to zero.

The running time must not exceed 1 second for any test case.

INPUT:

four lines, each line is sequence of  $n$  integers,  $n \leq 1000$ , separated by space.

OUTPUT:

four numbers, from four different sequences, that sum to zero, or "None exists" if such four numbers do not exist.

If there are more than one set of four numbers that sum to zero, output any set.

Example:

INPUT	OUTPUT
1 1 1 1 2 2 -2 2 3 3 3 3 0 -6 0 0	1 2 3 -6
1 2 3 4 5 6 7 8 4 3 2 1 0 0 0 0	None exists