Lab: Arrays

Problems for lab for the "PHP Fundamentals" course @ SoftUni.

You can check your solutions in Judge.

1. Day of Week

Enter a **day number** [1…7] and print the **day name** (in English) or "**Invalid Day!**". Use an **array of strings**.

Examples

Input	Output
1	Monday
2	Tuesday
7	Sunday
0	Invalid Day!

2. Print Numbers in Reverse Order

Read n numbers and print them in reverse order.

Examples

Input	Output
3 10 20 30	30 20 10
3 30 20 10	10 20 30
1 10	10

3. Rounding Numbers

Read an array of real numbers (space separated), round them in "**away from 0**" style and print the output as in the example: **"0.90 => 1"**. "0.90" is rounded to the second decimal place.

Examples

Input	Output
0.9 1.5 2.4 2.5 3.14	0.90 => 1 1.50 => 2 2.40 => 2 2.50 => 3 3.14 => 3
-5.01 -1.599 -2.5 -1.50 0	-5.01 => -5 -1.60 => -2 -2.50 => -3 -1.50 => -2 0.00 => 0

Hints

To round **"away from 0"** use **`round()`** method. By default the method's rounding mode is **away from 0**.

4. Reverse an Array of Strings

Write a program to read **an array of strings**, **reverse** it and **print** its elements. The input consists of a sequence of space separated strings. Print the output on a single line (space separated).

Examples

Input	Output
a b c d e	e d c b a
-1 hi ho w	w ho hi -1

5. Sum Even Numbers

Read an array from the console and sum only the even numbers.

Examples

Input	Output
1 2 3 4 5 6	12
3 5 7 9	0
2 4 6 8 10	30

6. Even and Odd Subtraction

Write a program that calculates the difference between the sum of the even and the sum of the odd numbers in an array.

Examples

Input	Output	Comments
1 2 3 4 5 6	3	2 + 4 + 6 = 12 1 + 3 + 5 = 9 12 - 9 = 3

3 5 7 9	-24	
2 4 6 8 10	30	

7. Equal Arrays

Read two arrays and print on the console whether they are identical or not. Arrays are identical if their elements are equal. If the arrays are identical find the sum of the first one and print on the console following message: "Arrays are identical. Sum: {sum}", otherwise find the first index where the arrays differ and print on the console following message: "Arrays are not identical. Found difference at {index} index".

Examples

Input	Output
10 20 30 10 20 30	Arrays are identical. Sum: 60
1 2 3 4 5 1 2 4 3 5	Arrays are not identical. Found difference at 2 index
1 10	Arrays are not identical. Found difference at 0 index

8. Condense Array to Number

Write a program to read **an array of integers** and **condense** them by **summing** adjacent couples of elements until a **single integer** is obtained. For example, if we have 3 elements {2, 10, 3}, we sum the first two and the second two elements and obtain {2+10, 10+3} = {12, 13}, then we sum again all adjacent elements and obtain {12+13} = {25}.

Examples

Input	Output	Comments
2 10 3	25	2 10 3 → 2+10 10+3 → 12 13 → 12 + 13 → 25
5 0 4 1 2	35	5 0 4 1 2 → 5+0 0+4 4+1 1+2 → 5 4 5 3 → 5+4 4+5 5+3 → 9 9 8 → 9+9 9+8 → 18 17 → 18+17 → 35
1	1	1 is already condensed to number