Lab: Arrays

Please submit your solutions (source code) of all below-described problems in Judge

1. Day of Week

Write a program that:

- Reads an **integer number** from the console
- If the number **is in range [1; 7]** you have to print:
  - **Monday** if the number is **1**
  - **Tuesday** if the number is **2**
  - **Wednesday** if the number is **3**
  - **Thursday** if the number is **4**
  - **Friday** if the number is **5**
  - **Saturday** if the number is **6**
  - **Sunday** if the number is **7**
- If the number is out of the given range above print: "**Invalid day!**"

Examples

Input	Output
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday
7	Sunday
0	Invalid day!
9	Invalid day!

2. Print Numbers in Reverse Order

Write a program that:

- Read integer number **N** from the first line of the console (N < 100)
- Read **N integer numbers** from the next N lines of the console
- Print entered numbers in **reverse order**

Examples

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

30 20 10	
1 10	10

3. Sum Even Numbers

Write a program that:

- Read an **integer number (< 100)**, which represents **size of the array**, from the first line of the console
- Read an **array of integer numbers** from the second line of the console
- **Sum only the even numbers** from the given array
- Print **calculated sum**

Examples

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

4. Reverse an Array of Strings

Write a program that:

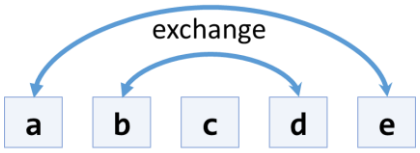
- Read an **integer number (< 100)**, which represents **size of the array**, from the first line of the console
- Read **an array of strings** (space-separated), from the second line of the console
- **Reverse** the given array
- **Print** reversed array on a single line (space separated)

Examples

Input	Output
5 a b c d e	e d c b a
4 -1 hi ho w	w ho hi -1

Hints

- Read the array of strings
- **Exchange** the **first** element (at index 0) with the **last** element (at index n - 1)
- **Exchange** the **second** element (at index 1) with the element **before the last** (at index n - 2)
- Continue the same way until the middle of the array is reached



5. Even and Odd Subtraction

Write a program that:

- Read an **integer number (< 100)**, which represents **size of the array**, from the first line of the console
- Read **an array of integers** (space-separated), from the second line of the console
- Calculate the difference between the **sum of the even** and the **sum of the odd** numbers in an array
- **Print the difference**

Examples

Input	Output	Comments
6 1 2 3 4 5 6	3	Sum even numbers: 2 + 4 + 6 = 12 Sum odd numbers: 1 + 3 + 5 = 9 Difference: 12 – 9 = 3
4 3 5 7 9	-24	Sum even numbers: 0 Sum odd numbers: 3 + 5 + 7 + 9 = 24 Difference: 0 – 24 = –24
5 2 4 6 8 10	30	Sum even numbers: 2 + 4 + 6 + 8 + 10 = 30 Sum odd numbers: 0 Difference: 30 – 0 = 30

6. Equal Arrays

Write a program that:

- Read an **integer number (< 100)**, which represents **size of the arrays**, from the first line of the console
- Read **two integer arrays from** the next two lines of the console
- **Arrays are identical if their elements are equal**
- Print on the console whether they **are identical or not**
- If the arrays are identical, find the sum of the first one and print on the console the 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
3 10 20 30 10 20 30	`Arrays are identical. Sum: 60`
5 1 2 3 4 5 1 2 4 3 5	`Arrays are not identical. Found difference at 2 index.`
1	`Arrays are not identical. Found difference at 0 index.`

1 10	