

Lab: Arrays

Test your tasks in the Judge system: <https://judge.softuni.org/Contests/4427>

1. Day of Week

Write a program that:

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

Example

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

2. Sum an Array

Write a program that:

- Read an **array of integers** (from a single line separated with a space)
- Print the **sum** of all elements in the given array

Example

Input	Output	Input	Output	Input	Output
5 3 6 3 4	21	20 30 -5	45	25 45 -3	67

3. Reverse an Array

Write a program that:

- Read an **integer number N** from the console
- After that read **N integer numbers** from the console, each on separate line
- Store the numbers in the array of integers
- Reverse the numbers in the array

- Print elements of the array on a single line, space-separated

Example

Input	Output	Input	Output
3 10 20 30	30 20 10	4 10 20 30 40	40 30 20 10

4. Even and Odd Subtraction

Write a program that:

- Read an **array of integers** (from a single line separated with a space)
- Calculates the difference between the sum of the even and the sum of the odd numbers in an array
- Print the difference

Example

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

5. Equal Arrays

Write a program that:

- Read **two arrays with the same length** from the console
- **Check whether they are identical or not**
 - If the arrays are identical, print: **"Arrays are identical."**
 - If the arrays are NOT identical, print: **"Arrays are not identical."**

Note: Arrays are identical if their elements are equal.

Example

Input	Output
10 20 30 10 20 30	Arrays are identical.
1 2 3 4 5 1 2 4 3 5	Arrays are not identical.
1 10	Arrays are not identical.

6. Common Elements

Write a program that:

- Read **two integer arrays with the same length** from the console
- Prints common elements in two arrays, space-separated

Examples

Input	Output
20 30 40 50 30 10 15 50	30 50
7 8 9 10 1 2 3 7	7
1 2 3 4 5 5 4 3 2 1	1 2 3 4 5