

Day2_Java_Assignment1

1. Primitive Data Types

Task: Create a program that accepts age, height, and weight of a person and prints them with appropriate data types.

Sample Input:

Age: 25

Height: 5.9

Weight: 68.5

Sample Output:

Age: 25

Height: 5.9

Weight: 68.5

2. Variables

Task: Declare and initialize different types of variables to store a student's information: ID, name, marks, and grade. Print them.

Sample Input:

ID: 101

Name: Arun

Marks: 89.5

Grade: A

Sample Output:

Student ID: 101

Name: Arun

Marks: 89.5

Grade: A

3. Operators

Task: Accept two numbers and perform arithmetic, relational, and logical operations on them.

Sample Input:

Number1: 10

Number2: 20

Sample Output:

Addition: 30

Greater number: 20
Are both positive? true

4. String Concatenation

Task: Create a greeting message using first name and last name entered by the user.

Sample Input:

First Name: Ravi
Last Name: Kumar

Sample Output:

Hello, Ravi Kumar! Welcome to the system.

5. StringBuilder

Task: Accept a sentence and reverse it using `StringBuilder`.

Sample Input:

Input: Hello Java Learners

Sample Output:

Original: Hello Java Learners

Reversed: srenraeL avaJ olleH

6. String API

Task: Count how many times a specific character appears in a string.

Sample Input:

String: banana
Character: a

Sample Output:

Character 'a' appears 3 times.

7. Date, Time, and Numeric Objects

Task: Display the current date and format it as DD-MM-YYYY. Also, show a formatted currency value.

Sample Input:

Date: [current system date]
Amount: 12345.678

Sample Output:

Current Date: 20-07-2025

Formatted Amount: ₹12,345.68

8. Flow Control

Task: Based on a number entered, print whether it's positive, negative, or zero.

Sample Input:

Number: -5

Sample Output:

The number is negative.

9. Conditions

Task: Accept marks and display the grade using `if-else`.

Sample Input:

Marks: 76

Sample Output:

Grade: B

10. Switch

Task: Build a simple calculator using `switch` to perform operations (+, -, *, /).

Sample Input:

Number1: 10

Number2: 5

Operation: *

Sample Output:

Result: 50

11. Loops and Branching

Task: Print the first N even numbers using a loop.

Sample Input:

N = 5

Sample Output:

0 2 4 6 8

12. Arrays

Task: Accept 5 numbers, store them in an array, and display their average.

Sample Input:

Numbers: 10, 20, 30, 40, 50

Sample Output:

Average: 30.0

13. Enum

Task: Create an enum for days of the week. Print a message depending on the day.

Sample Input:

Day: MONDAY

Sample Output:

Start of the work week!

14. OOPs Concepts

Task: Create a `Student` class with fields for name and marks. Create an object and display its data.

Sample Input:

Name: Riya

Marks: 87

Sample Output:

Student Name: Riya

Marks: 87

15. Inheritance

Task: Create a class `Employee` and a subclass `Manager` that extends `Employee` and adds department information.

Sample Input:

Name: Raj

Salary: 50000

Department: Sales

Sample Output:

Name: Raj

Salary: 50000

Department: Sales