

CSIT751 (Core Java)

Module I – Introduction to Java

Programming Exercises for Practice (Practical Home Assignment 1)

1. Identifier Naming Practice

Task:

Write a program that declares variables for a student's name, roll number, and marks in three subjects. Assign values and print them. Ensure all variable names follow Java identifier rules.

2. Data Type Conversion

Task:

Write a Java program that:

- Stores an integer value for temperature in Celsius.
 - Converts it to Fahrenheit using the formula $F = (C \times 9/5) + 32$.
 - Displays both Celsius and Fahrenheit values.
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3. Arithmetic Operations

Task:

Accept two integers from the user and perform addition, subtraction, multiplication, division, and modulus. Display results for each operation.

4. Logical Operators – Eligibility Check

Task:

Write a program to check if a person is eligible to vote.

- Input: age and citizenship status (true or false).
 - Use logical operators (&&, ||) to decide eligibility.
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5. Control Statement – Simple Calculator

Task:

Write a program that:

- Takes two numbers and an operator symbol (+, -, *, /) from the user.
 - Uses `if-else` statements to perform the appropriate operation.
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6. Loop – Multiplication Table

Task:

Ask the user for a number and print its multiplication table from 1 to 10 using a `for` loop.

7. Loop with Conditional – Sum of Even Numbers

Task:

Write a program that uses a `while` loop to find the sum of all even numbers between 1 and 50.

8. Arrays – Store and Print Marks

Task:

Write a program that:

- Reads marks of 5 students into an integer array.
 - Prints each student's marks.
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9. Arrays and Loops – Find Maximum

Task:

Write a program to read 10 integers into an array and find the maximum value using a loop.

10. Mini Project – Average and Grade

Task:

Write a program that:

- Reads marks of 5 subjects into an array.
- Calculates the average marks.
- Uses `if-else` to assign grades:
 - `>= 90`: A
 - `>= 75`: B

- ≥ 50 : **C**
- Else: **Fail**