

Java Basic Exercise

Exercise 1: Positive or Negative

Problem:

Write a Java program that checks if a number is positive or negative.

Input: -5

Output: Negative number

Exercise 2: Even or Odd

Problem:

Check if a number is even or odd using if-else.

Input: 14

Output: Even

Exercise 3: Greater of Two Numbers

Problem:

Print the larger number among two inputs.

Input: 12 15

Output: 15 is greater

Exercise 4: Number is Zero or Not

Problem:

Determine if a number is zero.

Input: 0

Output: Zero

Exercise 5: Grading System

Problem:

Print grade based on marks:

- 90+ = A
- 80+ = B
- 70+ = C
- below 70 = Fail

Input: 75

Output: Grade: C

Exercise 6: Age Group

Problem:

Print category based on age:

- <13 = Child

- $13-19 = \text{Teen}$

- $20+ = \text{Adult}$

Input: 16

Output: Teen

Exercise 7: Leap Year Checker

Problem:

Check if a year is a leap year using logical operators.

Input: 2024

Output: Leap Year

Exercise 8: Smallest of Three Numbers

Problem:

Determine the smallest among three numbers using if-else-if.

Input: 5 9 3

Output: Smallest is 3

Exercise 9: Character Type Checker

Problem:

Check if a character is a letter, digit, or special character.

Input: @

Output: Special character

Exercise 10: Vowel or Consonant

Problem:

Check whether a character is a vowel or consonant.

Input: e

Output: Vowel

Exercise 13: Pass or Fail

Problem:

Check if the score is at least 33 to pass.

Input: 30

Output: Fail

Exercise 12: Absolute Value

Problem:

Print the absolute value of a number.

Input: -19

Output: 19

Exercise 14: Weekday Name

Problem:

Take an integer (1–7) and return the day name. Use nested if-else.

Input: 3**Output:** Wednesday**Exercise 15: Eligibility for Voting****Problem:**

Check if a person is eligible to vote (age ≥ 18).

Input: 17**Output:** Not eligible to vote**Exercise 16: Integer Sign Detector****Problem:**

Print "positive", "negative", or "zero".

Input: 0**Output:** Zero**Exercise 17: Login Attempt****Problem:**

If username = "user" and password = "pass", allow login.

Input: user, pass**Output:** Login Successful**Exercise 18: Triangle Type****Problem:**

Check triangle type:

- All sides equal \rightarrow Equilateral
- Two equal \rightarrow Isosceles
- All different \rightarrow Scalene

Input: 3 3 3**Output:** Equilateral**Exercise 19: Temperature Checker****Problem:**

Print "Hot", "Warm", or "Cold" based on Celsius value:

- ≥ 30 = Hot
- $20\text{--}29$ = Warm
- <20 = Cold

Input: 15**Output:** Cold

