

Java Conditional Statements – Complete Notes

1. Introduction

Conditional statements in Java are used to execute different blocks of code based on conditions. They help in decision-making during program execution.

2. Types of Conditional Statements

- 1 if statement
- 2 if-else statement
- 3 else-if ladder
- 4 nested if
- 5 switch statement

3. Syntax and Explanation

if: Executes code only when condition is true.

if-else: Executes one block if condition is true, otherwise another.

else-if ladder: Checks multiple conditions.

nested if: if inside another if.

switch: Executes based on matching case value.

4. Interview Questions

- 1 Difference between if-else and switch?
- 2 Can switch work with String in Java?
- 3 What is nested if?
- 4 Which is faster: if-else or switch?
- 5 What happens if no case matches in switch?
- 6 Can we use boolean in switch?
- 7 Explain fall-through in switch.
- 8 What is default case?
- 9 Can if statement exist without else?
- 10 When should we use else-if ladder?

5. Important Basic Programs (20)

- 1 Check if number is positive or negative
- 2 Check even or odd
- 3 Find largest of two numbers
- 4 Find largest of three numbers
- 5 Check leap year

- 6 Check vowel or consonant
- 7 Grade calculation
- 8 Simple calculator using switch
- 9 Weekday from number
- 10 Month days using switch
- 11 Check eligibility to vote
- 12 Check palindrome number
- 13 Check Armstrong number
- 14 Check prime number
- 15 Find smallest of three numbers
- 16 Bonus calculation
- 17 Electricity bill calculation
- 18 Traffic signal simulation
- 19 Temperature conversion
- 20 Pass or fail check

6. Best Websites to Practice Coding

- 1 LeetCode – logic & interviews
- 2 HackerRank – beginners friendly
- 3 CodeChef – competitive programming
- 4 GeeksforGeeks – concepts + problems
- 5 CodingBat – Java basics practice
- 6 InterviewBit – structured learning
- 7 Codeforces – advanced practice