🟢 Basic Level (Warm-up)

1. Write a Java program to check whether a number is **positive or negative**.
2. Check whether a number is **even or odd** using `if-else`.
3. Check whether a given number is **greater than 100**.
4. Compare two numbers and print the **greater number**.
5. Check whether a person is **eligible to vote** (age ≥ 18).
6. Check whether a character is a **vowel or consonant**.
7. Check whether a number is **divisible by 5**.
8. Check whether a year is **greater than 2000 or not**.
9. Check whether a number is **zero or non-zero**.
10. Check whether a character is **uppercase or lowercase**.

🟡 Medium Level (Logic Building)

11. Check whether a number is a **two-digit number**.
12. Check whether a year is a **leap year**.
13. Find the **largest of three numbers** using `if-else`.
14. Check whether a number is **divisible by 3 and 7**.
15. Check whether a character is an **alphabet, digit, or special character**.
16. Calculate **grade** based on marks:
    - ≥ 90 → A
    - ≥ 75 → B
    - ≥ 60 → C
    - < 60 → Fail
17. Check whether a number is **prime or not**.
18. Check whether a triangle is **valid** using three angles.
19. Check whether a number is **palindrome**.
20. Find **profit or loss** based on cost price and selling price.

🔵 Tricky / Interview-Type

21. Check whether a number is **positive, negative, or zero**.
22. Check whether a character is a **vowel using logical OR (`||`)**.
23. Check whether a number lies **between 10 and 50**.
24. Find the **smallest of three numbers**.
25. Check whether a number is **divisible by 2, 3, or both**.
26. Check whether a given character is a **valid password character** (letter or digit).
27. Check whether a number is **multiple of 4 but not 6**.
28. Print **Hello** if number > 0, **Bye** if < 0, else **Zero**.
29. Check whether a student **passes all subjects** (each ≥ 40).

30. Check whether a number is **Armstrong number** (3-digit).