**C++ (If / Else)**

**Level 1**

1. A program to check if a person is eligible to **vote** (age ≥ 18).
2. A program to check whether a given number is **even or odd**.
3. A program to check whether a given number is **positive, negative, or zero**.
4. A student passes an exam if marks ≥ 40, else fails. Write a program to display result.
5. Write a program to find the **largest of two numbers** using if-else.

**Intermediate Level**

1. A shopkeeper gives **10% discount** if the purchase amount > 500, otherwise no discount.
2. Write a program to check whether a number is **divisible by 5 and 11** or not.
3. A program to input three numbers and find the **largest among them** using nested if-else.
4. Write a program to check if a year is **leap year** or not.
5. Write a program to calculate **grade** of a student based on marks:

* 90–100 → A
* 75–89 → B
* 50–74 → C
* Below 50 → Fail

**Real-Life Scenarios**

1. A traffic police officer checks vehicle speed:

* ≤ 60 → Safe
* 61–100 → Warning
* 100 → Fine

1. ATM withdrawal: If amount ≤ balance → “Transaction Successful”, else → “Insufficient Balance”.
2. An electricity board charges:

* First 100 units → ₹5/unit
* Next 100 units → ₹7/unit
* Above 200 units → ₹10/unit  
   Write a program to calculate bill.

1. A cinema hall gives **student discount** (20%) if age < 18, otherwise charges full ticket price.
2. Write a program to check whether the entered character is a **vowel or consonant**.

**Challenging**

1. Write a program to input 3 sides of a triangle and check whether it is **valid** (sum of two sides > third).
2. Write a program to check if a number is a **palindrome** (e.g., 121, 1331).
3. A banking app checks:

* If balance < 1000 → Low balance warning
* If balance ≥ 1000 and < 5000 → Normal balance
* If balance ≥ 5000 → High balance

1. A temperature app:

* <0°C → Freezing
* 0–15°C → Cold
* 16–30°C → Moderate
* 30°C → Hot

1. A marksheet system that checks **eligibility for scholarship**:

* If marks ≥ 90 and attendance ≥ 75% → Eligible
* Else → Not eligible