# Python Assignment 2: Conditional Statements

Objective:
To understand and apply Python conditional statements — if, elif, else, and nested conditions — through practical problems.

## Instructions:

1. Write Python code for each question in a new cell or file.
2. Use proper comments to explain your logic.
3. Test your code with different inputs to verify correctness.
4. Avoid using libraries unless explicitly mentioned.

### Q1. Basic If-Else Check
Write a Python program to check whether a given number is positive, negative, or zero.

### Q2. Even or Odd Number
Write a program that takes an integer as input and prints whether it is even or odd.

### Q3. Largest of Three Numbers (Using elif)
Write a Python program to find the largest among three numbers using if, elif, and else.

### Q4. Grade Calculator
Write a Python program that accepts marks (0–100) and prints the grade based on given conditions.

### Q5. Leap Year Checker (Nested if)
Write a program to check whether a given year is a leap year or not.

### Q6. Nested Conditions – Eligibility Check
Write a program to check if a person is eligible to vote and to contest an election.

### Q7. Restaurant Bill (if-elif-else with Nested Logic)
Write a program that calculates the final bill at a restaurant applying discounts based on conditions.

### Q8. Character Classification
Write a Python program to check whether a character entered by the user is a vowel, consonant, or not an alphabet.

### Q9. Traffic Signal System (Nested Conditions)
Simulate a simple traffic light system using if-elif-else.

### Q10. Bonus Challenge – Student Report Card

Write a Python program to accept marks for 5 subjects and print grade, percentage, and pass/fail status.