**Conditional Statement**

**Section 1: if Statement (Problems)**

* **Positive Number Checker**  
   a program that checks if a number is positive. If it is, print "Positive Number".
* **Even Number Checker**  
  Given a number, check if it is even. If yes, print "Even number".
* **Age Eligibility**  
  Check if a person is above 18. If yes, print "Eligible for voting"
* **Divisible by 5 Checker**  
  Write a program to check whether a number is divisible by 5.  
  If true, print **"Divisible by 5"**. **Temperature Alert**
* **Eligible for discount**  
  Write a program that checks if a customer has purchased items worth more than ₹500.  
  If yes, print **"Eligible for discount"**.
* **Odd Number Checker**  
  Write a program in JavaScript to check whether a given number is odd.  
  If the number is **not divisible by 2**, print **"Odd number"**.
* **Temperature Alert**  
  Write a program to check if the temperature is above 40°C.  
  If it is, print **"Heat Alert: Stay indoors!"**.
* **Uppercase Letter Checker**  
  Given a character, write a program to check if it is an uppercase letter (A–Z).  
  If yes, print **"Uppercase character"**.

**Section 2 : if-else Statement (Problems)**

* **Weekend or Weekday**  
  Take a day input and check if it’s "Saturday" or "Sunday". If yes, print "Weekend", else print "Weekday".
* **Greater Number Checker**  
  Write a program that takes two numbers and prints the greater one.  
  If both are equal, print **"Both numbers are equal"**.
* **Check Multiples of 3**  
  Create a program to check whether a number is divisible by 3.  
  If yes, print **"Multiple of 3"**; otherwise, print **"Not a multiple of 3"**.
* **Light Switch**  
  Assume a variable isLightOn = true.  
  If the light is on, print **"Light is ON"**; else print **"Light is OFF"**
* **Check If a Number Lies Between 10 and 20**  
  Take a number input.  
  If the number is **between 10 and 20 (inclusive)**, print **"In range"**, else print **"Out of range"**.
* **Check if Character is Vowel or Consonant**  
  Take a character as input.  
  If it's a vowel (a, e, i, o, u), print **"Vowel"**, else print **"Consonant"**.

**Section 3: else-if Ladder (Problems)**

1. **Grading System**  
   Write a program that prints grade based on marks:
   * 90+ → A
   * 80–89 → B
   * 70–79 → C
   * Below 70 → D
2. **Temperature Category**  
   Check the temperature and print:
   * 40+ → "Hot"
   * 30–39 → "Warm"
   * 20–29 → "Pleasant"
   * Below 20 → "Cold"
3. **Age Group Classification**  
   Based on age input, print:
   * 0–12 → "Child"
   * 13–19 → "Teenager"
   * 20–59 → "Adult"
   * 60+ → "Senior"
4. **Traffic Signal Meaning**  
   Based on the color of a traffic signal, print:
   * "Red" → "Stop"
   * "Yellow" → "Ready"
   * "Green" → "Go"
   * Other → "Invalid color"
5. **User Role Access**  
   Print the level of access based on user role:
   * "admin" → "Full access"
   * "editor" → "Edit access"
   * "viewer" → "Read-only access"
   * Others → "No access"

**Section 4 : Nested If-else (Problems)**

* **Positive, Negative, or Zero**  
  Write a Java program to check whether a number is **positive**, **negative**, or **zero**.
* If the number is **greater than 0**, print "Positive".
* If it's **less than 0**, print "Negative".
* If it's **equal to 0**, print "Zero".
* **Can You Vote in India ?**  
  Ask the user for their **nationality** and **age**.
* If the person is from "India" and 18 years or older, print "Eligible to vote".
* If they are from India but under 18, print "Not eligible to vote due to age".
* If they are not from India, print "Not an Indian citizen".
* **Simple Login System**   
  Create a login system with a stored **username** and **password**.
* If the username is "admin" and the password is "1234", print "Login successful".
* If the username is correct but the password is wrong, print "Incorrect password".
* If the username is wrong, print "Invalid username".
* **Check if Number is Divisible by 2 and 3**  
  Write a program to check whether a number is divisible by **both 2 and 3**.
* If yes, print "Divisible by both 2 and 3".
* If divisible by 2 only, print "Divisible by 2 only".
* If not divisible by 2, print "Not divisible by 2".
* **Student Pass/ Fail in Two Subjects**  
  Check whether a student passed in both **Math** and **Science**.
* If both marks are **35 or more**, print "Passed in both subjects".
* If failed in Science, print "Failed in Science".
* If failed in Math, print "Failed in Math".
* **ATM Withdrawal**  
  Write a program to simulate an **ATM withdrawal**.
* If the withdrawal amount is **less than or equal to balance**, and it's a **multiple of 100**, print "Withdrawal successful".
* If it’s not a multiple of 100, print "Amount must be a multiple of 100".
* If it's more than balance, print "Insufficient balance".
* **Pass/Fail in English and Hindi**  
  Check if a student passed in both **English** and **Hindi**.
* If marks in both subjects are **35 or above**, print "Passed in both languages".
* If passed in English but failed in Hindi, print "Failed in Hindi".
* If failed in English, print "Failed in English".
* **Weather Checker Based on Temperature**  
  Write a program to check the weather based on temperature.
* If the temperature is between **30 and 40**, print "It's a hot day".
* If it is **above 40**, print "Extreme heat warning!".
* Otherwise, print "Weather is normal".
* **Even or Odd with Positive/Negative Check**  
  Take a number and check:
* If it's **even and positive**, print "Positive Even".
* If it's **even and negative**, print "Negative Even".
* If it's **odd**, print "Odd number".
* **Check Discount for Prime Member**  
  Check if a customer is a **prime member** and how much they spent.
* If the user is a prime member and spent **more than ₹500**, print "20% discount applied".
* If a prime member spent ₹500 or less, print "10% discount applied".
* If not a prime member, print "No discount for non-prime users".