

## Positive or Negative

### Problem:

Write a program to check whether a given number is **positive**, **negative**, or **zero**.

### Input:

An integer n

### Output:

Print:

- Positive if  $n > 0$
- Negative if  $n < 0$
- Zero if  $n == 0$

## Even or Odd

### Problem:

Write a program to check whether a given number is **even** or **odd**.

### Input:

An integer n

### Output:

Print:

- Even
- Odd

## Largest of Two Numbers

### Problem:

Write a program to find the **largest of two numbers**.

### Input:

Two integers a and b

### Output:

Print the larger number

## Pass or Fail

### Problem:

Write a program to check whether a student has **passed** or **failed**.

### Condition:

- Pass if marks  $\geq 35$

- Fail otherwise

**Input:**

An integer marks

**Output:**

Print:

- Pass
- Fail

**Largest of Three Numbers****Problem:**

Write a program to find the **largest of three numbers**.

**Input:**

Three integers a, b, and c

**Output:**

Print the largest number

**Leap Year****Problem:**

Write a program to check whether a given year is a **leap year**.

**Input:**

An integer year

**Output:**

Print:

- Leap Year
- Not a Leap Year

**Problem:**

Write a program to check whether a person is **eligible to vote**.

**Condition:**

Age  $\geq$  18

**Input:**

An integer age

**Output:**

Print:

- Eligible to Vote
- Not Eligible

**Grade Calculator****Problem:**

Write a program to print the **grade** based on marks.

**Conditions:**

- $\geq 90 \rightarrow$  Grade A
- $\geq 75 \rightarrow$  Grade B
- $\geq 50 \rightarrow$  Grade C
- $< 50 \rightarrow$  Fail

**Input:**

An integer marks

**Output:**

Print the grade

**Divisible by 3 and 7****Problem:**

Write a program to check whether a number is divisible by **both 3 and 7**.

**Input:**

An integer n

**Output:**

Print:

- Divisible by both
- Not divisible by both

**Electricity Bill Calculation****Problem:**

Write a program to calculate electricity bill based on units consumed.

**Conditions:**

- First 100 units → ₹1 per unit
- Next 100 units → ₹2 per unit
- Above 200 units → ₹3 per unit

**Input:**

An integer units

**Output:**

Print total bill amount

**Salary Bonus Calculation**

**Problem:**

Write a program to calculate bonus based on salary and years of service.

**Conditions:**

- Service  $\geq 5$  years → 10% bonus
- Service  $< 5$  years → No bonus

**Input:**

Salary and years of service

**Output:**

Print bonus amount

**Menu-Based Operation**

**Problem:**

Write a program that performs an operation based on user choice.

**Choices:**

- 1 → Addition
- 2 → Subtraction
- 3 → Multiplication
- 4 → Division

**Input:**

Two numbers and a choice

**Output:**

Print the result of the selected operation

**Check Multiple of 10**

**Problem:**

Write a program to check whether a given number is a **multiple of 10**.

**Input:**

An integer n

**Output:**

Print:

- Multiple of 10
- Not a multiple of 10

**Compare Two Numbers****Problem:**

Write a program to compare two numbers.

**Input:**

Two integers a and b

**Output:**

Print:

- a is greater
- b is greater
- Both are equal

**Check Divisible by 2 or 3****Problem:**

Write a program to check whether a number is divisible by **2 or 3**.

**Input:**

An integer n

**Output:**

Print:

- Divisible by 2 or 3
- Not divisible by 2 or 3

**Check Alphabet Case (Using ASCII)**

**Problem:**

Write a program to check whether a given character is **uppercase or lowercase** using ASCII values.

**Input:**

A single character ch

**Output:**

Print:

- Uppercase
- Lowercase

**Valid Triangle Type****Problem:**

Write a program to determine the type of triangle.

**Conditions:**

- All sides equal → Equilateral
- Two sides equal → Isosceles
- All sides different → Scalene

**Input:**

Three integers a, b, c

**Output:**

Print the triangle type

**Simple Calculator Using Conditions****Problem:**

Write a program to perform calculation using operator choice.

**Choices:**

+ , - , \* , /

**Input:**

Two numbers and one operator

**Output:**

Print the result

## **Employee Promotion Eligibility**

### **Problem:**

Write a program to check promotion eligibility.

### **Conditions:**

- Experience  $\geq 3$  years
- Performance rating  $\geq 4$

### **Input:**

Years of experience and rating

### **Output:**

Print:

- Eligible for Promotion
- Not Eligible

## **Exam Result Classification**

### **Problem:**

Write a program to classify result based on marks.

### **Conditions:**

- $\geq 75 \rightarrow$  Distinction
- $\geq 60 \rightarrow$  First Class
- $\geq 50 \rightarrow$  Second Class
- $\geq 35 \rightarrow$  Pass
- $< 35 \rightarrow$  Fail

### **Input:**

An integer marks

### **Output:**

Print result classification

## **Insurance Premium Calculation**

### **Problem:**

Write a program to calculate insurance premium.

### **Conditions:**

- Age < 25 → ₹5000
- Age 25–40 → ₹7000
- Age > 40 → ₹9000

**Input:**

Age

**Output:**

Print premium amount

**Internet Data Usage Alert**

**Problem:**

Write a program to display data usage message.

**Conditions:**

- Usage ≤ 50% → Normal Usage
- Usage ≤ 90% → Warning
- Usage > 90% → Limit Exceeded

**Input:**

Data usage percentage

**Output:**

Print alert message

**Bank Loan Eligibility**

**Problem:**

Write a program to check loan eligibility.

**Conditions:**

- Salary ≥ 25,000
- Credit score ≥ 700

**Input:**

Salary and credit score

**Output:**

Print:

- Loan Approved
- Loan Rejected

## **Online Order Discount**

### **Problem:**

Write a program to calculate discount on purchase.

### **Conditions:**

- Amount  $\geq$  5000  $\rightarrow$  20% discount
- Amount  $\geq$  3000  $\rightarrow$  10% discount
- Below 3000  $\rightarrow$  No discount

### **Input:**

Purchase amount

### **Output:**

Print final payable amount

## **Traffic Signal System**

### **Problem:**

Write a program to simulate traffic signal behavior.

### **Conditions:**

- Signal = Red  $\rightarrow$  Stop
- Signal = Yellow  $\rightarrow$  Ready
- Signal = Green  $\rightarrow$  Go

### **Input:**

Signal color

### **Output:**

Print action