OOPs lab Exercise-1 on 23/01/26

Observation Questions:

1. Write a c++ program to Perform the all the basic arithmetic operations on two integer operands, two floating point operands and two mixed operands. For this, initialize the inputs to the operands and store the result in some variable and display the same.
2. Write a C++ program to read the values of the operands and print the results of the computed expression given below:
    a) A=(b+c)*(b-c)
    b) C=(f-32)/100
    c) A= -(R1/R2+R3)
    d) A=0.5*float1 + 0.25*integer1+integer2/0.4+integer3
3. Write a program to convert temperature from Fahrenheit to centigrade. For this,get the Fahrenheit value as integer and use the following formula for conversion
   Formula c=5/9(f-32)
4. write a c++ program to explore relational, logical and bitwise operators by giving two operands and display the result on the screen.
5. Write a c++ program to swap the values of two numbers.

Execution Questions:

1. Write a C++ program to accept a person's **age** and **citizenship status**(0/1) and determine whether the person is **eligible to vote**.
2. Write a C++ program to check whether two integers are **equal** using the **bitwise XOR operator**.
3. Write a c++ program to input a day number (1–7) and print the corresponding day name using enum datatype with switch construct.
4. Write a function to calculate **sum and product** of two numbers and return the result to main function.
5. Write a C++ program to calculate the electricity bill based on the following slab rates:

Units Consumed	Rate per Unit
0 – 100	1.50
101 – 200	2.00
201 – 500	3.00
Above 500	5.00

Rules:

- If the total bill exceeds 2000, add a **surcharge of 15%**.
- Display the total bill to the user.