COURSE: (CL-1004) OBJECT ORIENTED PROGRAMMING LAB

LAB TASK # 1

NOTE:
Only submit .cpp file of each question in a folder. Anyone who submits any other format file will get straight **ZERO.** Each question should have a separate .cpp file. Copy Paste or other UFM will also get **ZERO**. Use the following format for naming the folder Roll#_Name (P18-1234_NAME).

Q No.01: Problem

Assume that you want to generate a table of multiples of any given number. Write a program that allows the user to enter the number and then generates the table, formatting it into 10 columns and 10 lines.

Problem (Output)

```
Enter a number: 2
   2    4    6    8   10   12   14   16   18   20
  22   24   26   28   30   32   34   36   38   40
  42   44   46   48   50   52   54   56   58   60
  62   64   66   68   70   72   74   76   78   80
  82   84   86   88   90   92   94   96   98  100
 102  104  106  108  110  112  114  116  118  120
 122  124  126  128  130  132  134  136  138  140
 142  144  146  148  150  152  154  156  158  160
 162  164  166  168  170  172  174  176  178  180
 182  184  186  188  190  192  194  196  198  200
```

Q No.02: Problem (Statement)

Create the equivalent of a four-function calculator. The program should ask the user to enter a number, an operator, and another number. (Use floating point.) It should then carry out the specified arithmetical operation: adding, subtracting, multiplying, or dividing the two numbers. Use a switch statement to select the operation. Finally, display the result.
When it finishes the calculation, the program should ask whether the user wants to do another calculation. The response can be ‘y’ or ‘n’. Some sample interaction with the program might look like this:

Problem (Output)

```
Enter first number, operator, second number: 5 * 8
Answer = 40
Do another (Enter 'y' or 'n')? y

Enter first number, operator, second number: 5+3
Answer = 8
Do another (Enter 'y' or 'n')?
```

Q No.03: Problem –3 (Statement)

Ask user to enter a five-digit number and then display the last 3 digits in reverse order.

Q No.04: Problem –4 (Statement)

Suppose that x, y, and z are int variables, and x = 10, y = 15, and z = 20. Write a program that will print the output of the following:

1. !(x > 10)
2. x <= 5 || y < 15
3. (x != 5) && (y != z)
4. x >= z || (x + y >= z)
5. (x <= y - 2) && (y >= z) || (z - 2 != 20)

Q No.05: Problem –5 (Statement)

In a company, there are deductions from the salary of the employees for a fund. The deductions rules are as follows:

- If salary is less than Rs.10,000 then no deduction
- If salary is equal to or more than Rs.10,000 and less than Rs.20,000 then deduct Rs.1,000 as fund
- If salary is equal to or more than 20,000 then deduct 7 % of the salary for fund
- Input salary from user and after appropriate deduction show the net payable amount.