

Familiarize with the operating environment of the Lab.

1) Write a program (WAP) to find the average temperature of five sunny days .

i) use scanf and printf

ii) use cin and cout

2) WAP to calculate the total cost of the vehicle by adding basic cost with a) excise duty(15%) b) Sales tax(10%) c) Octroi (5%) and d) Road tax(1%).

3) Write a program to evaluate the following expressions and display their results:

a)  $x^3 + 2x^2 + 3x$

b)  $x^1 + y^2 + z^3$

4) WAP to find the number of months and days when days are entered.(Assume each month contains 30 days)

5) WAP to print whether the number entered is even or odd using conditional operator.

6) WAP (write a program) to print the sum of n integers starting from mth integer.

7) WAP to find the greatest of three given numbers.

i) using if

ii) using nested if-else

iii) using nested conditional operator

8) WAP to ensure that the difference between any two-digit number and its reverse is always a multiple of nine.

For example if entered number is 54 and its reverse is 45.

The difference between them is 9. (use do-while)

9) WAP to find out the roots of a quadratic equation.

10) WAP to generate the Pascal triangle.

11) WAP to enter an alphabet through keyboard. Use switch() case structure and print appropriate message.

Recognize the entered alphabet whether it is vowel or consonants

12) WAP to check whether number is prime or not.

13) WAP to find the factorial of a number.(use while)

14) WAP to display the following pattern:

```
1
1 2 3
1 2 3 4
```

15) WAP to use while statement in do-while statement and print values from 1 to 5

16) WAP to count the number of students having age between 15 and 20 out of n students entered.(use continue statement to skip the loop and break statement to come out if n students have been entered)

17) WAP to find the average sales of an item out of 12 months sale using arrays.

18) WAP to find the similar elements in an array and find the occurrence of similar numbers for number of times.

19) WAP to sort the given list of numbers in ascending order.

20) WAP to multiply two given matrices.

21) WAP to convert a binary number into decimal number.

i) with arrays

ii) without arrays