Higher Diploma in Information Technology

Introduction to Programming (C++)

Year 1 Semester 1 – 2023

Tutorial 02 – Elements in C++

1. Write a C++ Program to Display Number (Entered by the User).

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Sample Output:
Enter an integer: 8
The Number entered is: 8
```

2. Write a C++ Program to find Addition of Two Numbers.

```
Sample Output:
Enter first number: 12
Enter second number: 34
Sum of two numbers: 46
```

3. Write a C++ program to calculate the perimeter of rectangle. The user can enter the length

   and the width respectively to calculate the perimeter of the rectangle.

   The equation for Perimeter of the Rectangle follows:

   Perimeter of Rectangle = 2 X (Length + Width)

```
Sample Output:
Enter length of Rectangle: 6.5
Enter width of Rectangle:5
Perimeter of Rectangle: 23.0000
```

4. Write a C++ program to prompt the user to enter radius (r) , height(h) ,and calculate the

   volume of cone(V) as follows:

   $$V = \frac{1}{3} PI * r^2 h$$

   Consider PI=3.14 (Constant value)

```
Sample Output:
Enter radius: 2
Enter height: 10
Volume of cone is: 41.87
```

5. Write a C++ program to prompt the user to enter Current(I) and Voltage(V), and calculate

   the Electric power (P) as follows:

   P= I * V

```
Sample Output:
Enter Current: 25
Enter Voltage: 4
Electric power is: 100
```