

## Assignment # 1

Due Date: **Sunday 11 Oct, 2020, 11:59 PM**

On Google Classroom

Objective: **Console Output, Variables and Control Structure**

### NOTES:

1. Understanding the question is part of assignment, so do not ask anyone else to understand the problem for yourself and tell you the solution. Do it yourself.
2. The name of cpp files should be l20XXXX\_q\_no.cpp where XXXX is your roll number.
3. Make a .zip file which will contain all cpp files and name that zip file as l20XXXX.zip and submit this zip file.
4. Always check the boundary values [Recall Problem solving].
5. Always use proper variable names and proper indentation for readability.
6. Always use comments to elaborate the code.

you can comment in c++ through:

```
// This is single line comment
```

```
/*      This is  
        Multi line  
        Comment      */
```

7. Always follow the output and input format.

**8. DON'T involve in PLAGIARISM.**

### Question # 1 [Your & Course Info. ] :

Write a c++ program to output the given screen after inserting your roll number and name. [Use escape sequence].

**Sample Input/Output:**

```
*****  
*      Roll Number: 20L-XXXX      *  
*      Your Name                    *  
*      Assignment # 1               *  
*      Course: Programming F.       *  
*      Due Date: 11 Oct, 2020       *  
*****
```

### Question # 2 [Sales Total]:

A customer in a store is purchasing five items. The prices of the five items are:

Price of item 1 = Rs 12.95

Price of item 2 = Rs 24.95

Price of item 3 = Rs 6.95

Price of item 4 = Rs 14.95

Price of item 5 = Rs 3.95

Write a program that holds the prices of the five items in five variables. Display

- each items price,
- the subtotal of the sale,
- the amount of sales tax, assume the sales tax is 6%.
- and the total: Total Sale = Sub Total of Sale + Sales Tax

**Note: Carefully choose the data types to hold data. Which should be int (if any) and which should be float (if any)?**

### Sample Input/Output:

Output:

Price of item 1 = Rs 12.95

Price of item 2 = Rs 24.95

Price of item 3 = Rs 6.95

Price of item 4 = Rs 14.95

Price of item 5 = Rs 3.95

The subtotal of the sale : 63.75

The sales tax is: 3.825

Total sale: 67.575

### Question # 3 [Hexadecimal to Binary & Octal]:

Consult the link: <https://www.rapidtables.com/convert/number/hex-to-binary.html>

Write a c++ program to take a hexadecimal number from 00 to FF. Convert it to binary (direct method) and show on console.

### Sample Input/Output:

Input:

HEX digit # 1: F

HEX digit # 2: E

Output:

Binary equivalent to FF is: 11111110

### Question # 4 [Calculate Your Age]:

Consult the link: <https://www.calculator.net/age-calculator.html>

Write a c++ program to take input your date of birth & the current date and prints the exact age.

### Sample Input/Output:

Input:

Input Date of Birth:

Day : 14

Month : 2

Year : 2000

Input the Current Date:

Day : 3

Month : 10

Year : 2020

Output:

You are 20 years 7 months 19 days

**Question # 5 [Number in English Words]:**

**Consult the link:** <https://www.calculatorsoup.com/calculators/conversions/numberstowords.php>

Write a c++ program which takes input a number from 1 to 999 and print the equivalent number in words of English.

**Sample Input/Output:**

Input:

Number : 847

Output:

Eight Hundred Forty Seven

\*\*\*\*\* Best of Luck 😊 \*\*\*\*\*