**Lab Tasks**

**Task# 1.**

Write a C program to print the following characters in a reverse way.

*Test Characters*: 'X', 'M', 'L'   
*Expected Output*:   
The reverse of XML is LMX

**Task# 2.**

Write a C program to display multiple variables.

Sample *Variable*s :  
a+ c, x + c,dx + x, ((int) dx) + ax, a + x, s + b, ax + b, s + c, ax + c, ax + ux

*Declaration* :  
int a = 125, b = 12345;   
long ax = 1234567890;   
short s = 4043;   
float x = 2.13459;   
double dx = 1.1415927;   
char c = 'W';   
unsigned long ux = 2541567890;

**For your Understanding:**

* Type short int (or simply short) is an integral type that is larger than or equal to the size of type char, and shorter than or equal to the size of type int
* A long int is a signed integral type that is at least 32 bits, while a long long or long long int is a signed integral type is at least 64 bits

**Task# 3**.

Write a C program that accepts an employee's ID, total worked hours of a month and the amount he received per hour. Print the employee's ID and salary of a particular month.

Test Data :  
Input the Employees ID(Max. 10 chars): 0342   
Input the working hrs: 8   
Salary amount/hr: 15000   
Expected Output:  
Employees ID = 0342   
Salary = U$ 120000.00

**Task# 4**.

Evaluate the following expression and print the result:

**((3<5) && !(1>14) && (-5<-15)) || ((6==6) && !(2==2))**

**Task# 5.**

Write a program that checks whether a given integer is divisible by both 5 and 7, without a remainder.

Test Data :  
Input the number: 30

Result: Divisible by 5 and 15 both

**Task# 6.**

Write a program that calculates the area of a trapezoid by given sides a, b and height h.

Test Data :  
Input the value of a: 30

Input the value of b: 43

Input the value of h: 32

Result:

**Task# 7.**

Write a program that prints on the console the perimeter and the area of a rectangle by given side and height entered by the user.

**Task# 8.**

Write a program that takes as input a four-digit number in format abcd (e.g. 2011) and

performs the following actions:

-     Calculates the sum of the digits (in our example 2+0+1+1 = 4).

-     Prints on the console the number in reversed order: dcba (in our example 1102).

-     Puts the last digit in the first position: dabc (in our example 1201).

-     Exchanges the second and the third digits: acbd (in our example 2101).