Programming Fundamentals – Lab 2

Lab Tasks

Instructions:

You are required to solve the following tasks and create single file containing screenshots of code and output of all your programs in single file (MS Word, PDF). Please mention your Reg No and Full name on the first page of your submission.

Time allowed: 2.5 hours

Email your file at **zeeshan.sabir@au.edu.pk**

Lab Task 2.1:

Create C++ program that should print the following screen:

```
          **********
     *       Hello        *
     *       World       *
```

Lab Task 2.2

Create C++ program that should print the following output:

```
Month | Num of Hours
Jan | 100
Feb | 150
March | 130
April | 90
May | 110
June | 135
```

Lab Task 2.3:

Write a C++ program which would print the following as output:

Course Code		Course Name		Credit Hour
CS1114		ITC		4
CS1234		Computer Programming		4
CS1123		Cal-I		4
CS1121		Algebra		3
CS1124		Discrete Maths		3

Lab Task 2.4:

Fix the error from following program if any and print the output

```cpp
#include <iostream>
using namespace std;
int main()
{
    cout << "\nThis is\t a string\n\t\t"
            " with \"many\" escape sequences!\n";
    return 0;
}
```

Lab Task 2.5:

The following program contains several errors: fix the error and determine the output

```cpp
*/ Now you should not forget your glasses //
#include <stream>
int main
{
   cout << "If this text",
   cout >> " appears on your display, ";
   cout << " endl;"
   cout << 'you can pat yourself on '
        << " the back!"   << endl.
   return 0;
)
```

Lab Task 2.6:
Write a C++ program that two defines variables for floating-point numbers and initializes them with the values
123.456 and 76.543
Then display the sum and the difference of these two numbers on screen.

Lab Task 2.7:
Write a program that reads two integers and prints the result of following operation:

      a. Addition
      b. Subtraction
      c. Division
      d. Modulus
      e. Square

Lab Task 2.8:
Write a C++ program that should take radius as float variable and print the Area and Circumference of the circle.

Lab Task 2.9:

Write a program that defines variables m, n, p, and amount, as integer Solve the following expression on notebook by supposing some values of each variable, then execute your program for the same values and see the difference if any.

`(m + n) / (p + amount)`

Lab Task 2.10:

Write a program that reads a four-digit number from user, then the program should separate digits of the number e.g., 4567 to be displayed as:

    4

    5

    6

    7