Lab Task 7 & 8 – Inheritance

1. Create a console application named "SchoolPortal" that contains a base class that accepts student registration number, name of student and scores.

Write a program that will accept registration number, name, and department as input. Implement two departments called Science and Commercial using Inheritance.

If the student enters SCI, then get the marks of Computer Network, Data Structure and C-Sharp.

If the student enters COM, get the marks for Electronic Circuits, Circuit Analysis and Analog Communication.

Then call a method that will calculate the average of the three subjects. The output should display the registration number, name, and the details of subject wise marks and the average marks (You should make use of ToString() to achieve this).

Hint: Student is the base class; ScienceStudent and CommerceStudent are inherited from it.

2. Create a console application named "ShapesTest" that has a base class called Figure which contains x, y, and name as member variables. x and y are double data type.

Then create 4 derived classes named rectangle, triangle, square and cube which inherit from base class Figure. Then create a method named area in base class figure which should be overridden in all derived class to

calculate the area for each derived classes. Use constructors for all classes to initialize data members. Data should be taken from user input.

==========SUBMISSION==========

Date: Tuesday, April 21, 2020
Time: 8:00 am

Please note serious attention is now being drawn to the originality of every task submitted. As it is generally believe that no two persons can reason exactly the way, picking the same variable names, implementing logic exactly the same way etc. Therefore, each student is expected to submit only his/her own authentic work.

This is not a collaborative task!!!