Assignment - 30 **A Job Ready Bootcamp in C++, DSA and IOT** **MySirG**

Overriding, overloading, constructor in inheritance

1. Create a class FLOAT that contains one float data member. Overload all the four arithmetic operators so that they can operate on the objects of FLOAT.
2. Define a class Rectangle and overload area function for different types of data type.
3. Define a base class Animals having member function sound() . Define another derived class from Animals class named Dogs. You need to override the sound function of the base class in the derived class.
4. Define a class Addition that can add 2 or 3 numbers of different data types using function overloading.
5. Define a class A having multiple constructors. Define another class B derived from class A. Create derived class constructors and show use of constructor in this single inheritance.
6. C++ Program to illustrate the use of Constructors in multilevel inheritance of your choice.
7. C++ Program to illustrate the use of Constructors in single inheritance of your choice.
8. Write a C++ program to find the factorial of a number using copy constructor
9. Write a C++ program to calculate the area of triangle, rectangle and circle using constructor overloading. The program should be menu driven.
10. Create a C++ class for player objects with the following attributes: player no., name, number of matches and number of goals done in each match. The number of matches varies for each player. Write a parameterized constructor which initializes player no., name, number of subjects and creates an array for number of goals and number of matches dynamically.