Lab Mid (Extra)

1. Create a class named Time that must have three integer data members (hours, minutes, and seconds). Create two constructors, one member function named add_time (return object), and one display function to print the time in 11:59:59 format. The add_time function must take two objects as arguments. The main function calls the add_time function to add two time objects and store the result in a third object. Use the display function to print the result on the console.

   Input: 2 55 40, 5 20 30

   Output: 8:16:10

2. Create a class named Football having data member radius and weight as integer type. A member function display() is used to show the values of radius and weight. A parameterized constructor is used to initialize the values of radius and weight. If no value is given while creating an object then, initialize the value of radius to 1 and weight to 2. Now create two objects ob1(10,20) and ob2 and show the values of radius and weight of the objects. Also mention the output.

3. Suppose you want to create a cloud storage service (e.g. google drive) named 'Drive49', which has a Total_capacity of 10GB (in which there are two portions Used and Free). Each time a new user creates an account to your service a new storage is constructed for the user. For a new user Used portion should be assigned to zero and Free portion should be assigned to 10. A user can Upload a file of a certain Size to his 'Drive49' storage. Uploading a file will increase the Used portion by the Size of the file and decrease the Free portion by the same amount of space. A user can extend the Total_capacity of his 'Drive49' by upgrading (Upgrade) his user plan. He can also View the status of his storage (Total_capacity, Used, Free). Now show the process of creating your 'Drive49' service and a User of the service. Also create a user and upgrade the used plan and finally show that users status.