OBJECT ORIENTED PROGRAMMING

ASSIGNMENT 3:-

Implement C++ program to create a base class called shape. Use this class to store two double type values that could be used to compute the area of figures. Derive two specific classes called function get\_data() to initialize base class data members and another member function display\_area() to compute and display the area of figures. Make classes to suit their requirements. Using these three classes, design a program that will accept dimension of a triangle or a rectangle interactively, and display the area. Remember the two values given as input will be treated as lengths of two sides in the case of rectangles, and as base and height in the case of triangles, and used as follows –

Area of rectangle = x\*y Area of rectangle = ½\*x\*y

DESCRIPTION :-

**next →←prev**In C++, inheritance is a process in which one object acquires all the properties and behaviors of its parent object automatically. In such way, you can reuse, extend or modify the attributes and behaviors which are defined in other class.

In C++, the class which inherits the members of another class is called derived class and the class whose members are inherited is called base class. The derived class is the specialized class for the base class.

## Derived Classes

A Derived class is defined as the class derived from the base class.

The Syntax of Derived class:

1. **class** derived\_class\_name :: visibility-mode base\_class\_name
2. {
3. // body of the derived class.
4. }

OUTPUT :-

Enter the length and breadth of a rectangle:

2

4

Area of the rectangle is : 8

Enter the base and height of the triangle:

2

6

Area of the triangle is : 6