

## Assignment 2

1. Write three programs which specify public, private and protected inheritance.
2. Write a program that demonstrates a multilevel inheritance.
3. Write a program that demonstrates a multiple inheritance.
4. Create a three-level hierarchy of classes with default constructors, along with destructors, both of which announce themselves to cout. Verify that for an object of the most derived type, all three constructors and destructors are automatically called. Explain the order in which the calls are made.
5. Write a program that defines a shape class with a constructor that gives value to width and height. Then define two sub-classes triangle and rectangle, that calculates the area of the shape *area()*. In the main, define two variables a triangle and a rectangle and then call the *area()* function in these two variables.
6. Write a program with a mother class and an inherited daughter class. Both of them should have a method *void display()* that prints a message (different for mother and daughter). In the main define a daughter and call the *display()* method on it.