

1. Create a class called Time, which has three private instance variables – hour, min and sec. It contains a method called add () which takes one Time object as parameter and print the added value of the calling Time object and passes Time object. In the main method, declare two Time objects and assign values using constructor and call the add () method.
2. Create a class Stack that declares a stack and the methods to perform push (), pop () and checkEmpty () operations on the stack. Create two stacks and write a menu-driven program to perform operations on the two stacks. Whenever the number of elements in the two stacks becomes equal, a message should automatically be generated displaying the number of elements in each stack.
3. Write an inheritance hierarchy for classes Quadrilateral, Trapezoid, Parallelogram, Rectangle and Square. Use Quadrilateral as the super class of the hierarchy. The instance variables of Quadrilateral should be the x-y coordinate pairs for the four endpoints of the Quadrilateral. Write a program that instantiates objects of your classes and outputs each object's area (except Quadrilateral).