Object Oriented Programming

JAVA

WEEK-4

1. Create a class called Area with a variable height. Create a triangle class that extends area class with the variables base and method to calculate the area(calArea( )). Create a rectangle class that extends area class with variables width & length also a method to calculate area(calArea( )). Now create a triangle and rectangle objects and print their areas.

2. Create two classes as Vehicle and Car where car is inheriting vehicle. Now create an object for the car and print the details. Note that data member and methods can be defined in both classes.

3. In a single package demonstrate default, public, protected, and private access modifiers using Inheritance concepts.

Note: Use Inheritance and Access Modifiers keywords: this, final, static

1. Create a class called Area with a variable height. Create a triangle class that extends area class with the variables base and method to calculate the area(calArea( )). Create a rectangle class that extends area class with variables width & length also a method to calculate area(calArea( )). Now create a triangle and rectangle objects and print their areas.

Tasks:

1. Raise exception for negative input value.
2. Display the concept of Inheritance.
3. Use keywords this, final and static for variables
4. Show minimum 3 testcases of your own:
    a) Correct
    b) Wrong
    c) Invalid (with exception)

2. Create two classes as Vehicle and Car where car is inheriting vehicle. Now create an object for the car and print the details. Note that data member and methods can be defined in both classes.

Tasks:

1. Display the concept of Inheritance.
2. Provide at least four variables for each car and print them.
3. Show If user enters two car with the same name, raise an exception.
4. Show at least 4 different car data.

3. In a single package demonstrate default, public, protected, and private access modifiers using Inheritance concepts.

Tasks:

1. Create objects for each below class and document the execution.
2. Create four classes:
   a) Public class with protected variables
   b) Default class with private and protected variables
   c) Private class private and public variables (error)
   d) Protected class (public variables)

HAPPY
CODING