Smt. Chandaben Mohanbhai Patel Institute of Computer Applications
CAU506: Enterprise Computing Using Java EE
MCA-I
Practical Assignment-1
Fundamentals of Object Oriented Concepts

Date: 01.08.2024

1. Write a program to accept Student information such as roll no, name, course and fees using suitable method and display the same.

2. Write a Java program can contain two classes: Computer and Laptop. Both classes have their own constructors and a method. In main method create object of two classes and call their methods.

3. Create class Student with instance variables Stud id, name, address, marks1, marks2, marks3. Write constructor to initialize the instance variables. Also, create method result which display percentage and average marks based on three subject marks.

4. Write a java code to demonstrate the use of "this" keyword with suitable example to remove the ambiguity between instance and local variable.

5. Demonstrate an application to show the uses of "super" keyword in java to access the member having same name of super and subclass.

6. Write a program to implement method overloading to find the area of circle, square, rectangle and triangle.

7. Demonstrate an application to show the uses of "super" keyword in java to call the constructor of super class from subclass.

8. Create person class with data members as person_id& name. Derive two classes Student & faculty from it. The fields of Student are course name & fees paid. The fields of faculty are subject name & number of year's experience. Use proper method to accept values & override display method. (Using parameterized constructor).

9. Write a program to find the area of Circle, Rectangle, Square using Runtime Polymorphism(DMD).

10. Declare an abstract class vehicle with an abstract method name numwheels(). Provide the two subclasses two-wheeler and four wheelers, each one of which implements this method. Create instance of these two subclasses and demonstrate the use of numwheels () method.

11. Write a program to Design a Shape as an interface and then Design class for Circle, Rectangle and Triangle which implements the interface and override method drawShape().

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