

Assignment-4

Method Overloading, Overriding and Abstract

- (1) Write a java program to display sum using method overloading.
- (2) Define a class series with overloaded method to print Fibonacci series. This class must contain following types of method.
 - (1) Void fibona() : It will print 10 terms of the series.
 - (2) Void fibona(int term) : It will print total N terms specified by term parameter.
- (3) Write a java program to demonstrate the use of method Overriding in program.
- (4) Write a java program to demonstrate the use of **abstract** class.
- (5) Write a java program to calculate simple interest using **abstract** class.
- (6) Write a java program that has class shape which include that **abstract method** name getarea(). Class rectangle, triangle and circle inherit the class shape and implements method getarea and return value of area respectively.

Polymorphisam (Dynamic Method Dispatch):

- (7) Write a java program that create three classes cricket, football and basketball. All these classes has same methods getpoint and dispoint methods. Now display data using polymorphism mechanism(Dynamic Method Dispatch)..
- (8) Write a java code that create classes sum, div, sub. All the classes contain same method getvalue and discalc. Apply dynamic dispatch method mechanism.

Interface

- (1) Define an **interface** addsub with two method void addition(int,int), void subtraction(int,int) and another **interface** muldiv with two method void multiply(int,int), and void devision(int,int) extends first interface into second interface and implements the interface into suitable class.
- (2) Create an interface **interarea** containing two method that float **area**(float,float), float **perimeter**(float,float). Create two different class **rectangle** and **circle** and implements above two methods in this class. In main two object create rectangle and circle using new operator for assign them into suitable class.
- (3) Write a java programing code for demonstrate the use of **Multiple Inheritance using interface**.
- (4) Write a java programing code for demonstrate the use of **Hybrid Inheritance using interface**.

Package and Access modifier

- (1) Write a java program to demonstrate create and import package.
- (2) Write a package code arithmetic that contains method to deal all arithmetic operation also write a program to used the package.
- (3) Create a package called shape inside the package define a class name as figure which compute the volume of cube, cylinder and rectangle using method overloading access this class and method from another file.
- (4) Create a package vehicle which will have 2 classes 2-Wheeler and 4-Wheeler. 2-Wheeler with method show(CC,price). 4-Wheeler with method show(regno, regyear).
- (5) Create a package TYBCA which will have 2 classes as class mathematics with methods to add 2 numbers and 3 float numbers and class Maximum with a method to find the maximum of 2 nos.
- (6) Create a java package Games, which have 2 classes Indoor and Outdoor. Use a function display() to generate the list of players for the specific games.
- (7) Write a java code to demonstrate access modifier.

What is package? How to define package and create a package in java explain it suitable example.