Java Assignment

Q1) Write a Java program to demonstrate Method Overloading.

Package Assignement;

class Example{

void display(int a){

System.out.println("a: "+a);

}

void display(double a){

System.out.println("a: "+a);

}

void display()

{

System.out.println("Hello DabbaFellow");

}

void display(int x, String y)

{

System.out.println("x:"+x+" y:"+y);

}

void display(String x, int y)

{

System.out.println("x:"+x+" y:"+y);

}}

Q2) Write a Java Program to reverse a string

Package Assignment;

public class ReverseString {

public static void main(String[] args) {

String str = "Java is a Programming Language";

char[] c= str.toCharArray();

for(int i=c.length-1; i>=0; i--) {

System.out.print(c[i]);

}

}

}

Q3) Create a class named 'Shape' with a method to print "This is shape". Then create two other classes named 'Rectangle', 'Circle' inheriting the Shape class, both having a method to print "This is rectangular shape" and "This is circular shape" respectively. Create a subclass 'Square' of 'Rectangle' having a method to print "Square is a rectangle". Now call the method of 'Shape' and 'Rectangle' class by the object of 'Square' class.

Package Assignment

class Shape {

public void shapeMethod() {

System.out.println("This is shape");

}

}

Package Assignment;

class Rectangle extends Shape {

public void rectangleMethod() {

System.out.println("This is rectangular shape");

}

}

Package Assignment;

class Circle extends Shape {

public void circleMethod() {

System.out.println("This is circular shape");

}

}

Package Assignment;

class Square extends Rectangle {

public void squareMethod() {

System.out.println("Square is a rectangle");

}

}

public class Main {

public static void main(String[] args) {

Square square = new Square();

square.shapeMethod();

square.rectangleMethod();

square.squareMethod();

}

}

Q4) Create a class with a method that prints "This is parent class" and its subclass with another method that prints "This is child class". Now, create an object for each of the class and call 1 - method of parent class by object of parent class 2 - method of child class by object of child class 3 - method of parent class by object of child class

package Assignment;

class Parent {

public void parentMethod() {

System.out.println("This is parent class");

}

}

Package Assignment:

class Child extends Parent {

public void childMethod() {

System.out.println("This is child class");

}

}

public class Main {

public static void main(String[] args) {

Parent parent = new Parent();

parent.parentMethod();

Child child = new Child();

child.childMethod();

Parent childAsParent = new Child();

childAsParent.parentMethod();

}

}

Q5)Create a class named 'Member' having the following members: Data members 1 - Name 2 - Age 3 - Phone number 4 - Address 5 - Salary It also has a method named 'printSalary' which prints the salary of the members. Two classes 'Employee' and 'Manager' inherits the 'Member' class. The 'Employee' and 'Manager' classes have data members 'specialization' and 'department' respectively. Now, assign name, age, phone number, address and salary to an employee and a manager by making an object of both of these classes and print the same

package Assignment;

public class Member {

String name = "Nandini";

int age = 21;

long phonenumber = 99267378L;

String address = ",Bangalore";

int salary = 500000;

//5.Assingment = Child class - Employee and Manager

public void printSalary() {

System.out.println("Salary :" +salary);

}

public static void main(String[] args) {

Member obj = new Member();

obj.printSalary();

}

}

package Assignment;

public class Employee extends Member {

String Specialization = "TestEnginer";

//5.Assingment = Parent class - Member

public static void main(String[] args) {

Employee obj1 = new Employee();

System.out.println("Name :" + obj1.name);

System.out.println("Age :" + obj1.age);

System.out.println("Contact number :" + obj1.phonenumber);

System.out.println("Address : " + obj1.address);

obj1.printSalary();

}

}

package Assignmnet;

public class Manager extends Member{

String department = "CS";

//5.Assingment = Parent class - Member

public static void main(String[] args) {

Manager obj2 = new Manager();

System.out.println("Name :" + obj2.name);

System.out.println("Age :" + obj2.age);

System.out.println("Contact number :" + obj2.phonenumber);

System.out.println("Address : " + obj2.address);

obj2.printSalary();

}

}