PROGRAMMING USING JAVA WEEK 7 ASSIGNMENT

# What is super class and subclass? Super class :

A superclass is the class from which many subclasses can be created. The subclasses inherit the characteristics of a superclass. The superclass is also known as the parent class or base class. Example : Vehicle is the Superclass and its subclasses are Car, Truck and Motorcycle.

# Sub class :

A subclass is a class derived from the superclass. It inherits the properties of the superclass and also contains attributes of its own.

An example is: Car, Truck and Motorcycle are all subclasses of the superclass Vehicle. They all inherit common attributes from vehicle such as speed, colour etc. while they have different attributes also i.e Number of wheels in Car is 4 while in Motorcycle is 2.

# Can you overload a final method in Java?

No, the Methods that are declared as final cannot be Overridden or hidden. For this very reason, a method must be declared as final only when we’re sure that it is complete.

* + ● It is noteworthy that abstract methods cannot be declared as final because they aren’t complete and Overriding them is necessary.
  + ● Methods are declared final in java to prevent subclasses from Overriding them and changing their behavior, the reason this works is discussed at the end of this article.
  + ● The advantage of the final keyword is that it stops developers from intentionally or unintentionally changing the behavior of methods that should not be changed for secur}

# Can a method be abstract and final?

Yes, it can. But the final method cannot be abstract itself. A method without body (no implementation) is known as abstract method. A method must always be declared in an abstract class, or in other words you can say that if a class has an abstract method, it should be declared abstract as well. This is how an abstract method looks in java:

public abstract int myMethod(int n1, int n2);

# Write the syntax for creating the subclass of a class? Syntax :

class SubClass extends SuperClass {

. . .

}

1. Write a program to get the personal details of students such as name, register number, age and department from the base class Student and display those information in a class named Student Display.

# Program :

class Personal

{

String name=new String(); String fname=new String(); String add=new String(); String phno=new String();

Personal(String a,String b,String c,String d) { name=a;

fname=b; add=c; phno=d;

}

void display()

{

System.out.println("Name is "+name); System.out.println("Address "+add); System.out.println("Father's Name is "+fname); System.out.println("Contact number "+phno);

}

}

class Education extends Personal

{

int roll,age; char section;

String branch=new String();

Education(String a, String b, String c, String d, int e, int f, char g, String h) { super(a,b,c,d);

roll=e; age=f; section=g; branch=h;

}

void display2()

{

super.display();

System.out.println("Roll Number="+roll); System.out.println("AGE="+age); System.out.println("SECTION="+section); System.out.println("Branch is "+branch);

}

}

class Hello

{

public static void main(String args[])

{

Education e=new Education("KRISH","RAM","VIZAG","9885098850",10,19,'B',"IT");

e.display2();

}

}

# Output :

Name is KRISH Address VIZAG Father's Name is RAM

Contact number 9885098850 Roll Number=10

AGE=19 SECTION=B

Branch is IT