**Single inheritance**

class Employee

{

int eno;

String ename;

public void setemp(int no,String name)

{

eno = no;

ename = name;

}

public void putemp()

{

System.out.println("Empno : " + eno);

System.out.println("Ename : " + ename);

}

}

class Department extends Employee

{

int dno;

String dname;

public void setdept(int no,String name)

{

dno = no;

dname = name;

}

public void putdept()

{

System.out.println("Deptno : " + dno);

System.out.println("Deptname : " + dname);

}

public static void main(String args[])

{

Department d = new Department();

d.setemp(100,"Devi");

d.setdept(20,"S/w Trainer");

d.putemp();

d.putdept();

}

}

**Multilevel inheritance**

import java.lang.\*;

import java.io.\*;

class Account

{

String cust\_name;

int acc\_no;

Account(String a, int b)

{

cust\_name=a;

acc\_no=b;

}

void display()

{

System.out.println ("Customer Name: "+cust\_name);

System.out.println ("Account No: "+acc\_no);

}

}

class Saving\_Acc extends Account

{

int min\_bal,saving\_bal;

Saving\_Acc(String a, int b, int c, int d)

{

super(a,b);

min\_bal=c;

saving\_bal=d;

}

void display()

{

super.display();

System.out.println ("Minimum Balance: "+min\_bal);

System.out.println ("Saving Balance: "+saving\_bal);

}

}

class Acct\_Details extends Saving\_Acc

{

int deposits, withdrawals;

Acct\_Details(String a, int b, int c, int d, int e, int f)

{

super(a,b,c,d);

deposits=e;

withdrawals=f;

}

void display()

{

super.display();

System.out.println ("Deposit: "+deposits);

System.out.println ("Withdrawals: "+withdrawals);

}

}

class Multilevel

{

public static void main(String args[])

{

Acct\_Details A = new Acct\_Details("pallavi ",666,1000,5000,500,9000);

A.display();

}

}

Hierarachical inheritance

class one

{

int x=10,y=20;

void display()

{

System.out.println("This is the method in class one");

System.out.println("Value of X= "+x);

System.out.println("Value of Y= "+y);

}

}

class two extends one

{

void add()

{

System.out.println("This is the method in class two");

System.out.println("X+Y= "+(x+y));

}

}

class three extends one

{

void mul()

{

System.out.println("This is the method in class three");

System.out.println("X\*Y= "+(x\*y));

}

}

/\* Main class \*/

class Hier

{

public static void main(String args[])

{

two t1=new two(); //Object of class two

three t2=new three(); //Object of class three

t2.display(); //Calling method of class one using class two object

t1.add(); //Calling method of class two

t2.mul(); //Calling method of class three

}

}

Multiple inheritance:

import java.lang.\*;

import java.io.\*;

interface Exam

{

void percent\_cal();

}

class Student

{

String name;

int roll\_no,mark1,mark2;

Student(String n, int r, int m1, int m2)

{

name=n;

roll\_no=r;

mark1=m1;

mark2=m2;

}

void display()

{

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

System.out.println ("Roll No. of Student: "+roll\_no);

System.out.println ("Marks of Subject 1: "+mark1);

System.out.println ("Marks of Subject 2: "+mark2);

}

}

class Result extends Student implements Exam

{

Result(String n, int r, int m1, int m2)

{

super(n,r,m1,m2);

}

public void percent\_cal()

{

int total=(mark1+mark2);

float percent=total\*100/200;

System.out.println ("Percentage: "+percent+"%");

}

void display()

{

super.display();

}

}

class Multiple

{

public static void main(String args[])

{

Result R = new Result("Devi",12,93,84);

R.display();

R.percent\_cal();

}

}

Hybrid inheritance:

class Student

{

int rollNumber;

void getNumber(int n)

{

rollNumber=n;

}

void putNumber()

{

System.out.println("Roll No :: "+rollNumber);

}

}

class Test extends Student

{

float part1,part2;

void getMarks(float m1,float m2)

{

part1=m1;

part2=m2;

}

void putMarks()

{

System.out.println("Marks Obtained\n");

System.out.println("PART1: "+part1);

System.out.println("PART2: "+part2);

}

}

interface Sports

{

float sportWt=6.0F;

void putwt();

}

class Results extends Test implements Sports

{

float total;

public void putwt()

{

System.out.println("Sports Wt="+sportWt);

}

void display()

{

total=part1+part2+sportWt;

putNumber();

putMarks();

putwt();

System.out.println("Total Score= "+total);

}

}

class Hybrid

{

public static void main(String args[])

{

Results r1=new Results();

r1.getNumber(1234);

r1.getMarks(17.4F, 33.0F);

r1.display();

}

}