INHERITANCE PRACTISE 1 – STUDENTS

```
import java.util.*;
class Student
{
    private String USN;
    private String Name;
    private int sem;
    void getStudentdata()
    {
        Scanner xx = new Scanner(System.in);
        System.out.print("Enter USN");
        USN = xx.nextLine();
        System.out.print("Enter Name");
        Name = xx.nextline();
        System.out.print("Enter semester");
        sem = xx.nextInt();
    }
    void printstudentdata()
    {
        System.out.print("Name of student is "+Name);
        System.out.print("USN of student " + USN);
        System.out.print("Semester " + sem);
    }
}
```

```
class Test extends Student
{
  private int cie[];
  privat int credits[];
  private int n;
  void setsize(int m)
  {
    n=m;
    cie= new int[n];
    credits= new int[n];
  }
  void getciemarks()
  {
    Scanner xx=new Scanner(System.in);
    System.out.print int i;
    for(i=0;i<n;i++)
    {
      System.out.print("Enter credits and cie of" +
                       (i+1)+"subject");
      credits[i] = xx.nextInt();
      cie[i] = xx.nextInt();
    }
  }
```

```
int returnsee marks()
{
    return see[i];
}
int returncredits()
{
    return credits[i];
}
}
class Exam extends Test
{
    private int see[];
    private int n1;
    void setsize1(int m)
    {
        n1=m;
        see = new int[n1];
    }
    void getseemarks()
    {
        Scanner xx = new Scanner(System.in);
        int i;
```

```
for(i=0; i<n1; i++)
{
    System.out.print("Enter SEE marks for "+(i+1)+" subject");
    see[i] = xx.nextInt();
}
}
int returnseemarks(int i)
{
    return see[i];
}
}
class Result extends Exam
{
    private double result;
    private int n;
    Result()
    {
        Scanner xx = new Scanner(System.in);
        getstudentdata();
        System.out.println("Enter number of subjects");
        int i = xx.nextInt();
        n = i;
```

```
setsize1(i);
getcie marks();
getsee marks();
}

void calculateresult()
{
    result = 0;
    double temp = 0;
    double total credits = 0;
    for(int i=0; i<n; i++)
    {
        temp = temp + returncie marks[i];
        temp = temp + (returnsee marks[i]/2);
        total credits = total credits + return credits[i];
        result = result + (temp * return credits[i]/100);
        temp = 0;
    }
    result = (result / total credits) * 10;
}

void print()
{
    System.out.println("SGPA is " + result);
}
```

```
class Main
{
    public static void main(String args[])
    {
        Scanner xx=new Scanner(System.in);
        System.out.print("Enter number of students");
        int n = xx.nextInt();
        Result[] r = new Result[n];
        for(int i=0; i<n; i++)
        {
            r[i]= new Result();
            r[i].calculateresult();
        }
        for(int i=0; i<n; i++)
        {
            r[i].printresult(i);
        }
    }
}
```