WEEK 9 LAB PROGRAM 6.

```java
package CIE;
import java.util.scanner;
public class Internals extends Student
{
    public int CIE ciemarks []=new int [5];
    public void getmarks ()
    {
        getdata();
        System.out.println("Enter CIE marks");
        for(i=0; i<5; i++)
        {
            ciemarks[i]=ss.nextInt();
        }
    }

    void display()
    {
        System.out.println("Name" : "+ this.name);
        System.out.println("USN: " + this.usn);
        System.out.println("Semester :"+this.sem);
    }
}
```

```java
package CIE;
import java.util.Scanner;
public class Student
{
    public String USN, name;
    public int sem;
    public Scanner ss = new Scanner (System.in);
    public void getdata()
    {
        System.out.println("Name : ");
        name = ss.next();
        System.out.println("USN: ");
        USN = ss.nextInt();
        System.out.println("Semester :");
        sem = ss.nextInt();
    }
}

package SEE;
import java.util.Scanner;
public class Externals extends CIE.Student
{
    public int seemarks[] = new int[5];
    Scanner ss = new Scanner (System.in);
```

```java
public void getmarks ()
{
    System.out.printhn (" Enter SEE marks");
    for (i=0; i<5; i++)
    {
        seemarks [i]=ss.nextInt ();
    }
}
}

import java.util.Scanner;
import CIE.*;
import SEE.*;
class Main
{
    public static void main (String args [])
    {
        Scanner ss =new Scanner (System.in);
        int n;
        int finalmarks [][] = new int [5][5];
        System.out.printhn(" Enter no. of students");
        n=ss.nextInt ();
        Internals studcie []= new Internals [n];
        Externals studsee []= new Externals [n];
```

```java
for(int i=0; i<n; i++)
{
    studie[i] = new Internals();
    studee[i] = new Externals();
    studcie[i].getmarks();
    studee[i].getmarks();
    for(int j=0; j<5; j++)
    {
        finalmarks[i][j] = studie[i].
        ciemarks[j] + (studeie[i].seemarks[j]
        /2);
    }
}
for(int i=0; i<n; i++)
{
    studie[i].display();
    for(int j=0; j<5; j++)
    {
        system.out.println(*finalmarks
        [i][j];
    }
}
}
}
```

WEEK 10 LAB PROGRAM 7.

```java
import java.util.Scanner;
class demo <T, S>
{
    T m1;
    S m2;

    demo (T m1, S m2)
    {
        this.m1 = m1;
        this.m2 = m2;
    }

    public void display ()
    {
        System.out.println ("The value of " +
        this.m1 + "is" + this.m2);
    }
}

class demomain
{
    public static void main (String args[])
    {
```

```
Demo <string, string> std1 = new
Demo <string, string> ("Name", "Ishika");
std1. dispeay();
    }
}
```

```java
package CIE;

import java.util.Scanner;

public class Internals extends Student
{
    public int ciemarks[]=new int[5];
    public void getmarks()
    {
        getData();
        System.out.println("Enter the CIE marks of the Student: ");
        for(int i=0;i<5;i++)
        {
            System.out.printf("Subject "+(i+1)+" :");
            ciemarks[i]=ss.nextInt();
        }
    }
    public void display()
    {
        System.out.println("Name: "+this.name);
        System.out.println("USN: "+this.usn);
        System.out.println("Semester: "+this.sem);
    }
}
```

G: > bin > CIE > Student.java > {} CIE

```java
package CIE;

import java.util.Scanner;

public class Student
{
    public String usn,name;
    public int sem;

    public Scanner ss=new Scanner(System.in);
    public void getData()
    {
        System.out.println("Name: ");
        name=ss.next();
        System.out.println("USN: ");
        usn=ss.next();
        System.out.println("Semester: ");
        sem=ss.nextInt();
    }
}
```

```java
package SEE;

import java.util.Scanner;


public class Externals extends CIE.Student
{
    public int seemarks[]=new int[5];
    Scanner ss=new Scanner(System.in);
    public void getmarks()
    {
        System.out.println("Enter the SEE marks of the Student: ");
        for(int i=0;i<5;i++)
        {
            System.out.printf("Subject "+(i+1)+" :");
            seemarks[i]=ss.nextInt();
        }
    }
}
```

G: > bin > Main.java > ...

```java
import java.util.Scanner;
import CIE.*;
import SEE.*;

class Main
{
    Run | Debug
    public static void main(String args[])
    {
        Scanner ss=new Scanner(System.in);
        int n;
        int finalmarks[][]=new int[5][5];
        System.out.println("Enter the number of Students: ");
        n=ss.nextInt();
        Internals studcie[]=new Internals[n];
        Externals studsee[]=new Externals[n];
        for(int i=0;i<n;i++)
        {
            System.out.println("\n***************************************************************************************\n");
            studcie[i]=new Internals();
            studsee[i]=new Externals();
            studcie[i].getmarks();
            studsee[i].getmarks();
            for(int j=0;j<5;j++)
            {
                finalmarks[i][j]=studcie[i].ciemarks[j]+(studsee[i].seemarks[j]/2);
            }
        }
        System.out.println("\n***************************************************************************************\n");
        System.out.println("The Students and their finals marks are: \n");
```

⚠ 5

```java
20          studsee[i]=new Externals();
21          studcie[i].getmarks();
22          studsee[i].getmarks();
23          for(int j=0;j<5;j++)
24          {
25              finalmarks[i][j]=studcie[i].ciemarks[j]+(studsee[i].seemarks[j]/2);
26          }
27      }
28  System.out.println("\n****************************************************************************\n");
29  System.out.println("The Students and their finals marks are: \n");
30  for(int i=0;i<n;i++)
31  {
32      studcie[i].display();
33      for(int j=0;j<5;j++)
34      {
35          System.out.println("Subject "+(j+1)+" :"+finalmarks[i][j]);
36      }
37      System.out.println("\n****************************************************************************\n");
38
39  }
40      }
41  }
```

TERMINAL   PROBLEMS 5   OUTPUT   DEBUG CONSOLE   1: Java Process Console ∨   + □ 🗑 ∧ ×

```
PS C:\Users\hp>  & 'c:\Users\hp\.vscode\extensions\vscjava.vscode-java-debug-0.30.0\scripts\launcher.bat' 'C:\Program Files\AdoptOpenJDK\jdk-11.0.9.11-hotspot\bin
\java.exe' '-Dfile.encoding=UTF-8' '-cp' 'C:\Users\hp\AppData\Local\Temp\vscodesws_a4ac1\jdt_ws\jdt.ls-java-project\bin' 'Main'
Enter the number of Students:
2

**************************************************************************

Name:
ishika
USN:
064
Semester:
2
Enter the CIE marks of the Student:
Subject 1 :23
Subject 2 :67
Subject 3 :50
Subject 4 :23
Subject 5 :12
Enter the SEE marks of the Student:
Subject 1 :34
Subject 2 :78
Subject 3 :98
Subject 4 :67
Subject 5 :100

**************************************************************************

Name:
ishikja
USN:
```

TERMINAL   PROBLEMS 5   OUTPUT   DEBUG CONSOLE   1: Java Process Console ∨   +   ⊞   🗑   ⌃   ✕

```
*****************************************************************************

Name:
ishikja
USN:
087
Semester:
2
Enter the CIE marks of the Student:
Subject 1 :34
Subject 2 :35
Subject 3 :36
Subject 4 :37
Subject 5 :38
Enter the SEE marks of the Student:
Subject 1 :89
Subject 2 :89
Subject 3 :89
Subject 4 :89
Subject 5 :89

*****************************************************************************

The Students and their finals marks are:

Name: ishika
USN: 064
Semester: 2
Subject 1 :40
Subject 2 :106
Subject 3 :99
```

G: > bin > ● Main.java > ...
1   import java.util.Scanner;

TERMINAL   PROBLEMS 5   OUTPUT   DEBUG CONSOLE   1: Java Process Console ∨   +   ⊓   🗑   ∧   ✕

```
***********************************************************************

The Students and their finals marks are:

Name: ishika
USN: 064
Semester: 2
Subject 1 :40
Subject 2 :106
Subject 3 :99
Subject 4 :56
Subject 5 :62

***********************************************************************

Name: ishikja
USN: 087
Semester: 2
Subject 1 :78
Subject 2 :79
Subject 3 :80
Subject 4 :81
Subject 5 :82

***********************************************************************

PS C:\Users\hp>
PS C:\Users\hp>
PS C:\Users\hp> cd 'g:\bin\programs java'; & 'c:\Users\hp\.vscode\extensions\vscjava.vscode-java-debug-0.29.0\scripts\launcher.bat' 'C:\Program Files\AdoptOpenJD
K\jdk-11.0.9.11-hotspot\bin\java.exe' '-Dfile.encoding=UTF-8' '-cp' 'C:\Users\hp\AppData\Roaming\Code\User\workspaceStorage\52609d74f618f292e0a3b14e2f3022b4\redha
t.java\jdt_ws\programs java_b548dbef\bin' 'ButtonList'
```