Lab Program - 6

Student.java

```
package CIE;
import java.util.Scanner;

public class Student
{
    public String usn;
    public String name;
    public int sem;
    Scanner ss = new Scanner(System.in);

    public Student()
    {
        usn = "";
        name = "";
        sem = 0;
    }

    public void accept()
    {
        System.out.println("Enter Personal Details\n");
        System.out.println("Enter the USN:");
        usn = ss.next();
        System.out.println("Enter the Name:");
        name = ss.next();
        System.out.println("Enter the Semester:");
        sem = ss.nextInt();
    }
}
```

// Internals.java file.

```
package CIE
import java.util.Scanner;
public class Internals extends Student
{
    public int n=5;
    public int cie[] = new int[n];
    public int i;
    Scanner ss = new Scanner(System.in);

    public void acceptcie()
    {
        System.out.println(" CIE marks Details ");
        System.out.println(" Enter the marks in each
                of the "+n+" subjects : ");
        for(i=0; i<n; i++)
        {
            System.out.println(" Enter the CIE marks in
            subject "+(i+1)+" : ");
            cie[i] = ss.nextInt();
        }
    }
}
```

// External.java file.

```
package SEE;
import java.util.Scanner;
import CIE.Student;

public class Externals extends CIE.Student
{
```

```
public int n=5;
public int see[] = new int[n];
public int i;
Scanner ss = new Scanner (System.in);

public void acceptsee()
{
    System.out.println("SEE marks Details");
    System.out.println("Enter the marks in
        each of the "+n+" subjects:");
    for(i=0; i<n; i++)
    {
        System.out.println("Enter the SEE marks
            in subject "+(i+1)+" :");
        see[i] = ss.nextInt();
    }
}
}
```

```
// Totalmarks.java (Driver class)
import CIE.*;
import SEE.*;
import java.util.Scanner;

class Totalmarks
{
    public static void main(String args[])
    {
        int n;
        int tot[][];
        Scanner ss = new Scanner(System.in);
        System.out.println("Enter the number of
                students :");
```

```
n = ss.nextInt();
tot = new int[n][5];
CIE.Internals ci[] = new CIE.Internals[n];
SEE.Externals se[] = new SEE.Externals[n];
for(int i=0; i<n; i++)
{
    System.out.println("Details of Student " + (i+1));
    ci[i] = new CIE.Internals();
    se[i] = new SEE.Externals();
    ci[i].accept();
    ci[i].acceptcie();
    se[i].acceptsee();
    for(int j=0; j<5; j++)
        tot[i][j] = ci[i].cie[j] + (se[i].see[j]/2);
}
for(int i=0; i<n; i++)
{
    System.out.println("Student " + (i+1) + " final marks out of 100");
    for(int j=0; j<5; j++)
        System.out.println("Marks in course " + (j+1) + ": " + tot[i][j]);
}
}
```

store
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Procedure to Execute

→ First compile the classes inside the CIE package namely, the Student.java file and the Internals.java file using the commands,

```
javac CIE/Student.java
javac CIE/Internals.java
```

→ Then compile the class inside the SEE package using the command,

```
javac SEE/Externals.java
```

→ Now compile the driver class i.e Totalmarks.java using the command,

```
javac Totalmarks.java
```

→ Execute using java Totalmarks.