

Lab - 6

Create a package CIE which has two classes - Student and Internals derived from student has an array that stores the Internal marks scored in five courses of the current Semester of the student. Create another package SEE which has the class External which is a derived class of student. This class has an array that stores the SEE marks scored in five courses of the current Semester of the student. Report the two packages in a file that declares the final marks of n students in all five courses.

→ CIE

External.java

Package cie;

import java.util.Scanner;

Public class External Extends Student {

Public int InternalsMarks[] = new int[5];

Scanner sc = new Scanner(System.in);

Public void setCIE()

for (int i=0; i<5; i++) {

System.out.println("Enter cie marks
of Subject ")+(i+1));

InternalsMarks[i] = sc.nextInt();

}

```
import java.util.Scanner;
public class Student {
    public int sem;
    public String usn, name;
    Scanner sc = new Scanner(System.in);
    public void setStudentDetails() {
        System.out.println("Enter your name:");
        name = sc.nextLine();
        System.out.println("Enter your USN:");
        USN = sc.nextLine();
        System.out.println("Enter your Sem:");
        sem = sc.nextInt();
    }
    public void getDetails() {
        System.out.println("Name: " + name);
        System.out.println("USN: " + USN);
        System.out.println("Sem: " + sem);
    }
}
```

External.java

```
package see;  
import cie.Internal;  
import java.util.Scanner;
```

```
public class External { Extends Testinternal {  
    public int seeMarks [ ] = new int [ 5 ];  
    public int final Marks [ ] = new Test [ 5 ];  
    Scanner sc = new Scanner ( System . in );  
    public void setSubject ( ) {  
        for ( int i = 0 ; i < 5 ; i ++ ) {  
            System . out . println ( " Enter See marks  
                of subject " + ( i + 1 ) );  
            seeMarks [ i ] = sc . nextInt ();  
        }  
    }  
}
```

```
public void computeFinal ( ) {  
    for ( int i = 0 ; i < 5 ; i ++ ) {  
        final Marks [ i ] = InternalMarks [ i ] + See  
        Marks [ i ] / 2;  
    }  
}
```

```
public void displayMarks ( ) {  
    for ( int i = 0 ; i < 5 ; i ++ ) {  
        System . out . println ( " Subject " + ( i + 1 ) +  
        " = " + final Marks [ i ] );  
    }  
}
```

DemoMain

DemoMain.java

Package DemoMain

```
import See.External;
public class DemoMain {
    public static void main(String args) {
        External Obj = new External();
        Obj.setStudentDetails();
        Obj.getDetails();
        Obj.setCIE();
        Obj.setSEE();
        Obj.computeFinal();
        Obj.displayMarks();
    }
}
```

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Output:

Enter your name: Shree Saureketh

Enter your USN: IBM22C1261

Enter your sem: 3

Name: Shree Saureketh

USN : IBM22C1261

Enter sem : 3

Enter your CIE marks of subject 1
40

Enter CIE marks of subject 2
40

Enter CIE marks of subject 3
38

Enter CIE marks of subject 4
35

Enter see marks of subject 1

36

Enter see marks of subject 2

99

Enter see marks of subject 3

98

Enter see marks of subject 4

97

Enter see marks of subject 5

95

Enter see marks of subject 6

95

Subject 1 = 89

Subject 2 = 89

Subject 3 = 86

Subject 4 = 82

Subject 5 = 83