

Create a package CIE which has 2 classes - Student & Internals. The class Student has member like usn, name, sem. The class Internals has an array that stores the internal marks scored in 5 courses of the current semester of the student. Create another package SEE which has the class external which is a derived class of Student.

package CIE;

import java.util.Scanner;

public class Student

{
 public String name;
 public String usn;
 public int sem;
 public void display()
 {

Scanner sc = new Scanner(System.in);

System.out.println("Name:");

name = sc.next();

System.out.println("USN:");

usn = sc.next();

System.out.println("Semester:");

sem = sc.nextInt();

}

}

package CIE;

import java.util.Scanner;

public class Internals extends Student

{
 public double ciem[];

public void display()
 {

ciem = new double[5];

Scanner sc = new Scanner(System.in);


```

System.out.println(" CIE Marks for 5 subjects");
for (int i = 0; i < 5; i++)
    cem[i] = sc.nextDouble();
}
}

```

```

package SEE;
import java.util.*;
import CIE.*;

```

```

public class External extends CIE Student
{

```

```

    public double cem[];

```

```

    public void display()
    {

```

```

        cem = new double[5];

```

```

        Scanner sc = new Scanner(System.in);

```

```

        System.out.println("SEE Marks for 5 subjects  
(out of 100). ");

```

```

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

```

```

            cem[i] = sc.nextDouble();

```

```

        }

```

```

    }

```

File with name Main.java (driver class)

```

import CIE.*;

```

```

import SEE.*;

```

```

import java.util.Scanner;

```

```

public class Main
{

```

```

{

```

```

    public static void main (String args[])
    {

```



```
int n;
Scanner sc = new Scanner(System.in);
System.out.println("Enter the number of students:");
n = sc.nextInt();
CIE Student st[] = new CIE Student[n];
CIE Student
CIE Internals in[] = new CIE Internals[n];
SEE Externals e[] = new SEE Externals[n];
for (int i = 0; i < n; i++)
{
```

```
    st[i] = new CIE Student();
    in[i] = new CIE Internals();
    e[i] = new SEE Externals();
    st[i].display();
    in[i].display();
    e[i].display();
    System.out.println("Total marks of student "
        + st[i].name + " in 5 subjects are:");
    for (int j = 0; j < 5; j++)
    {
```

```
        System.out.println(in[i].iem[j] + (e[i].sem[j]));
    }
}
}
}
```