

## Lab-6 program

Here package CIE has been created which has two class files student and Internal. Internal is a derived class of student. Now another package has been created with name SEE and a class file named External has been created. External is a sub class of student from CIE package. Now in file which has driver class CIE & SEE package has been imported and n object of Internal and External has been created. The total marks is then calculated from members of these two classes.

### Student.java

```
package CIE;

public class student {

    public String usn;
    public String name;
    public int sem;
    public student() {}

    public student(String usn, String name, int sem)
    {
        this.usn = usn;
        this.name = name;
        this.sem = sem;
    }
}
```

## Internals.java

URBAN  
EDGE

```
package CIE;
```

```
import java.util.Scanner;
```

```
public class Internals extends Student {
```

```
    Scanner s = new Scanner(System.in);
```

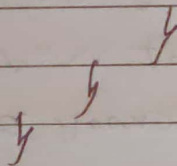
```
    public int[] cie = new int[5];
```

```
    public void get()
```

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

```
            sop("Enter CIE  
                mark in subject  
                " + (i+1));
```

```
            cie[i] = s.nextInt();
```



## Externals.java

```
package SEE;
```

```
import java.util.Scanner;
```

```
public class Externals extends CIE.Student {
```

```
    public Externals(String usn, String name,  
                    int sem)
```

```
    {  
        super(usn, name, sem);
```

```
    }
```

```
    Scanner s = new Scanner(System.in);
```

```
    public int[] see = new int[5];
```

```
    public void get()
```

```
    {
```



```
for(int i=0; i<n; i++) {
```

URBAN  
EDGE

```
    sop("Enter see mark in Subject "+(i+1));  
    see[i] = s.nextInt();  
}
```

final marks.java

```
import CIE.*;
```

```
import SEE.*;
```

```
import java.util.Scanner;
```

```
class final marks {
```

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

```
        Scanner s = new Scanner(System.in);
```

```
        sop("Enter no of students");
```

```
        int n = s.nextInt();
```

```
        SEE-External ob1[] = new SEE-External  
                                [n];
```

```
        CIE-Internal ob[] = new CIE-Internal [n];
```

```
        for (int i=0; i<n; i++)
```

```
        {
```

```
            sop("Enter, urn, name, sem of  
                student "+(i+1));
```

```
            String u = s.next();
```

```
            String na = s.next();
```

```
            int se = s.nextInt();
```

```
            ob[i] = new CIE-Internal();
```

```
            ob[i].get();
```

```
            ob1[i] = new SEE-External(u, na, se);
```

```
            ob1[i].get();  
        }
```

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

  sop("Name:" + obj[i].name + "usr:" +  
     obj[i].usr + "sem:" +  
     obj[i].sem);

  sop("The total marks of student (i) are");

  for (int j=0; j<5; j++)

  {

    sop("SUBJECT" + (j+1) + "=" + ~~obj[i].~~

     (obj[i].get(j) + (obj[i].see(j)/2))

  }

}

}

}