

13/1/23

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Lab program 8

Create a package CIE which has 2 classes - student and Internal. Student class has members like usn, name, sem. The class internal 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.

Import the 2 packages in a file that declares the final mark of a student in all five courses.

```
package cie;
```

```
import java.util. scanner;
```

```
public class student
```

```
{ public String usn = new String();
```

```
  public String name = new String();
```

```
  public int sem;
```

```
  public void accept()
```

```
  { scanner ss = new Scanner(System.in);
```

```
    System.out.println("Enter your USN:");
```

```
    usn = ss.next();
```

```
    System.out.println("Enter your name:");
```

```
    name = ss.next();
```

```
    System.out.println("Enter your semester:");
```

```
    sem = ss.nextInt();
```

```
  }
```

```
}
```

```

package cie;
import java.util.Scanner;
public class internals extends student
{
    public int[] cmarks = new int[5];
    public int i;
    public void accept1()
    {
        Scanner ss = new Scanner(System.in);
        System.out.println("Enter your CIE marks  
of 5 subjects:");
        for (i = 0; i < 5; i++)
        {
            cmarks[i] = ss.nextInt();
        }
    }
}

```

```

package see;
import cie.internals;
import java.util.Scanner;
public class externals extends internals
{
    public int smarks[] = new int[5];
    public int j;
    public void accept2()
    {
        Scanner ss = new Scanner(System.in);
        System.out.println("Enter your SEE marks  
of 5 subjects:");
        for (j = 0; j < 5; j++)
        {
            smarks[j] = ss.nextInt();
        }
    }

    public String toString()
    {
        String s = "USN: " + usn + "\n Name: " + name +
            "\n Sem: " + sem;
        return s;
    }
}

```

```
import cie.Student;
import cie.internals;
import sce.internals;
import java.util.Scanner;

public static void main
public class final marks {
    public static void main(String[] args) {
        int studs, k, f;
        int fmarks[] = new int[5];
        Scanner s1 = new Scanner(System.in);
        System.out.println("Enter the number of students: ");
        studs = s1.nextInt();
        internals e[] = new internals[studs];
        system.out.println("Enter both cie and sce marks out of 50");
        for (k=0; k<studs; k++) {
            e[k] = new internals();
            e[k].accept();
            e[k].accept1();
            e[k].accept2();
            for (f=0; f<5; f++)
                fmarks[f] = e[k].cmarks[f] + e[k].smarks[f];
            system.out.println("Student "+(k+1)+" details:");
            system.out.println(e[k]);
            for (f=0; f<5; f++)
                system.out.println("\n Final Marks : " + fmarks[f]);
        }
    }
}
```

Enter the number of students:
2
Enter both cie and see marks out of 50
Enter your USN:
1BM21CS005
Enter your name:
Aditi
Enter your semester:
3
Enter your CIE marks of 5 subjects:
47 48 49 50 35
Enter your SEE marks of 5 subjects:
44 46 40 50 29
Student 1 details:
USN: 1BM21CS005
Name: Aditi
Sem: 3

Final Marks: 91

Final Marks: 94

Final Marks: 89

Final Marks: 100

Final Marks: 64
Enter your USN:
1BM21CS999
Enter your name:
ZZZZZ
Enter your semester:
3

Enter your CIE marks of 5 subjects:

20 49 45 0 49

Enter your SEE marks of 5 subjects:

50 43 45 50 44

Student 2 details:

USN: 1BM21C5999

Name: ZZZZZ

Sem: 3

Final Marks: 70

Final Marks: 92

Final Marks: 90

Final Marks: 50

Final Marks: 93