

## WEEK 5

```
1 package CIE;
2
3 public class Personal {
4     public String usn, name;
5     public int sem;
6
7     public Personal(String usn, String name, int sem) {
8         this.usn = usn;
9         this.name = name;
0         this.sem = sem;
1     }
2
3     public void display() {
4         System.out.println("USN: " + usn);
5         System.out.println("Name: " + name);
6         System.out.println("Semester: " + sem);
7     }
8 }
9
package CIE;
10
11 public class Internals {
12     public int[] internalMarks = new int[5];
13
14     public Internals(int[] marks) {
15         for (int i = 0; i < 5; i++)
16             internalMarks[i] = marks[i];
17     }
18 }
```

```
package SEE;

import CIE.Personal;

public class External extends Personal {
    public int[] seeMarks = new int[5];

    public External(String var1, String var2, int var3, int[] var4) {
        super(var1, var2, var3);

        for(int var5 = 0; var5 < 5; ++var5) {
            this.seeMarks[var5] = var4[var5];
        }
    }

    import CIE.Internals;
    import SEE.External;
    import java.util.Scanner;

    public class FinalMarks {
        public FinalMarks() {
        }

        public static void main(String[] var0) {
            Scanner var1 = new Scanner(System.in);
            System.out.print("Enter number of students: ");
            int var2 = var1.nextInt();
            Internals[] var3 = new Internals[var2];
            External[] var4 = new External[var2];

            int var5;
            for(var5 = 0; var5 < var2; ++var5) {
                System.out.println("\nEnter details of student " + (var5 + 1));
                System.out.print("USN: ");
                String var6 = var1.next();
                System.out.print("Name: ");
                String var7 = var1.next();
                System.out.print("Semester: ");
                int var8 = var1.nextInt();
                int[] var9 = new int[5];
                System.out.println("Enter 5 Internal Marks:");
            }
        }
    }
}
```

```
for(int var10 = 0; var10 < 5; ++var10) {
    var9[var10] = var1.nextInt();
}

int[] var14 = new int[5];
System.out.println("Enter 5 SEE Marks:");

for(int var11 = 0; var11 < 5; ++var11) {
    var14[var11] = var1.nextInt();
}

var3[var5] = new Internals(var9);
var4[var5] = new External(var6, var7, var8, var14);
}

System.out.println("\n----- FINAL MARKS -----");

for(var5 = 0; var5 < var2; ++var5) {
    var4[var5].display();
    System.out.println("Final Marks in 5 Courses:");

    for(int var12 = 0; var12 < 5; ++var12) {
        int var13 = var3[var5].internalMarks[var12] + var4[var5].seeMarks[var12] / 2;
        System.out.println("Course " + (var12 + 1) + ": " + var13);
    }

    System.out.println();
}

var1.close();
}
```

```
Enter details of student 1
```

```
USN: 1bmcs24123
```

```
Name: shravan
```

```
Semester: 3
```

```
Enter 5 Internal Marks:
```

```
33
```

```
23
```

```
22
```

```
20
```

```
24
```

```
Enter 5 SEE Marks:
```

```
56
```

```
76
```

```
56
```

```
66
```

```
87
```

```
Enter details of student 2
```

```
USN: 1bmcs24121
```

```
Name: Vinod
```

```
Semester: 3
```

```
Enter 5 Internal Marks:
```

```
23
```

```
24
```

```
25
```

```
22
```

```
20
```

```
Enter 5 SEE Marks:
```

```
56
```

```
55
```

```
50
```

```
80
```

```
70
```

----- FINAL MARKS -----

USN: 1bmcs24123

Name: shravan

Semester: 3

Final Marks in 5 Courses:

Course 1: 61

Course 2: 61

Course 3: 50

Course 4: 53

Course 5: 67

USN: 1bmcs24121

Name: Vinod

Semester: 3

Final Marks in 5 Courses:

Course 1: 51

Course 2: 51

Course 3: 50

Course 4: 62

Course 5: 55