

~~Lab Pgmb~~
16/3/24

Create package CIF which has two classes: Student and Internate. The class student has members like USN, name, sem. The class Internate derived from student has an array that stores the internal marks stored 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 SEE marks scored in five courses of the current semester of the student. Import the two packages in a file that declares the final marks of n students in all five courses.

1) Student.java

package CIF;

import java.util.Scanner;

public class Student {

protected String USN = new String();

protected String name = new String();

protected int sem;

public void InputStudentDetails() {

Scanner sc = new Scanner(System.in);

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

USN = sc.next();

System.out.print("Enter name:");

name = sc.next();

System.out.print("Enter semester:");

sem = sc.nextInt();

}

```

public void displayStudentDetails() {
    System.out.println("USN: " + USN);
    System.out.println("Name: " + Name);
    System.out.println("Semester: " + Sem);
}
}

```

II Internals.java

```

package CIE;

```

```

import java.util.Scanner;

```

```

public class Internals extends Student {

```

```

    protected int marks[] = new int[5];

```

```

    public Internals() {
}

```

```

    public void inputCIEmarks() {
}

```

```

        Scanner sc = new Scanner(System.in);

```

```

        System.out.println("Enter internal marks for");

```

```

        name);

```

```

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

```

```

            System.out.print("Subject " + (i + 1) + " marks: ");
            marks[i] = sc.nextInt();
}

```

~~II Externals.java~~

```

package SEE;

```

```

import CIE.Internals;

```

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

```
public class External extends Internal {
```

```
protected int marks[];
```

```
protected int finalMarks[];
```

```
public External() {
```

```
marks = new int[5];
```

```
finalMarks = new int[5];
```

```
public void inputSEmarks() {
```

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

```
System.out.println("Enter SE marks for " + name);
```

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

```
System.out.print("Subject " + (i+1) + " Marks: ");
```

```
Marks[i] = sc.nextInt();
```

```
public void calculateFinalMarks() {
```

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

```
finalMarks[i] = Marks[i]/2 + Super_marks[i];
```

~~```
public void displayFinalMarks() {
```~~~~```
display Student Details();
```~~~~```
for (int i=0; i<5; i++)
```~~~~```
System.out.println("Subject " + (i+1) + ":" +
```~~~~```
finalMarks[i]);
```~~

## II Main.java

Import SEE.Externals;

public class Main {

    public static void main (String args[]) {

        int numofStudents = 2;

        Externals finalMarks [] = new Externals

(numofStudents);

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

            finalMarks [i] = new External();

            finalMarks [i]. InputStudentDetails();

            System.out.println ("Enter CIE marks : ");

            finalMarks [i]. InputCIEmarks();

            System.out.println ("Enter SEE marks : ");

            finalMarks [i]. InputSEEmarks();

    }

    System.out.println ("Displaying data : \n");

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

        finalMarks [i]. calculateFinalMarks();

        finalMarks [i]. displayFinalMarks();

    }

Output:

Enter VSN : 111

Enter Name : Santosh

Enter Semesters : 3

Enter CIE Marks

Enter Internal marks for Santosh

Subject 1 marks : 33

Subject 2 marks : 36

Subject 3 marks : 28

Subject 4 marks : 31

Subject 5 marks : 40

Enter See marks for Santosh

Subject 1 marks : 89

Subject 2 marks : 91

Subject 3 marks : 78 ( 09 fail ) not

Subject 4 marks : 79 ( 01 fail )

Subject 5 marks : 90 ( 01 fail )

Enter USN id : 11210101010101

Enter Name : Siri

Enter Semester : 3

Enter CIE marks :

Enter Internal marks for Siri :

Subject 1 marks : 33

Subject 2 marks : 28 ( fail )

Subject 3 marks : 23

Subject 4 marks : 24 ( 09 fail ) not

Subject 5 marks : 36 ( fail )

Enter See marks for Siri :

Subject 1 marks : 54

Subject 2 marks : 85

Subject 3 marks : 89

Subject 4 marks : 92

Subject 5 marks : 97

displaying data:

USN : 111

Name : Santosh

Semester : 3

Subject 1 : 77

Subject 2 : 81

Subject 3 : 67

Subject 4 : 73

Subject 5 : 85

USN : 112

Name : Srishti

Semester : 3

Subject 1 : 75

Subject 2 : 76

Subject 3 : 72

Subject 4 : 73

Subject 5 : 74

~~Ques 1~~

Ques 1 of part 1

"Binary Search"

Program for binary search in C = 62

~~Ques 2~~  
2-ii

ans 1

ans 2

ans 3

## STRINGS

① BNSe

BMSCE

stab visualis

② 3

3

Roll no 10 is present

III : 110

devisor : small

8 : 0.000000

FF : E. 0.000000

18 : 0.000000

8 : 0.000000

③ Dimensions are 10.0 by 14.0 by 12.6  
box b: Dimensions are 10.0 by 14.0 by 12.6

④ bmsce

III : 110

10% : small

8 : 0.000000

2F : E. 0.000000

SF : E. 0.000000

CF : E. 0.000000

Welcome to bmsce college.

⑤ Bmse equals Bmse → true  
Bmse equals college → false  
Bmse equals ignoreCase BMSCE → true.

⑥ Substring is matched

S1 = "Bmse college"

S2 = "Welcome to Bmse College of Engineering"

⑦ true

false

⑧ false  
true.

10 Hello equals Hello → true 'A' of 8 factors (21)  
Hello == Hello → false 'of 2nd / 3rd'

11 The names in alphabetical order are :  
apple      change in order of 3rd  
ball      1st or 2nd  
cat      3rd or 4th  
lion      4th or 5th  
watch      5th

12 sorted Numbers (Ascending order) : [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

13 Thomas was a test. Thus was too

14 hello world

15 colleague

16 Hello friends.

17 Student 1

Name : Sakshi

Reg no : 123

Semester : 3

CGPA : 8.87

~~Student 2~~

~~Name : Praganka~~

~~Reg no : 124~~

~~Semester : 4~~

~~CGPA : 9.05~~

18 charAt 3 is 'A'  $\leftarrow$  null string null  
reverse of SAS is SASf  $\leftarrow$  null = null

19 Eagle is flying. It makes a sound.  
Eagle makes a sound.

- Hawk is moving too
- Hawk is making a sound mild

20. Circle - Area: 78.5398 perimeter - 31.4259  
Triangle - Area: 5.0 perimeter - 12.0 (51)  
EduP, 2, F, 3, D, 1, 2, 4, 8, 1, 2, 7

~~our next month's test is our second~~

black olive

~~62-24~~

A sketch?

Method : next

Digitized by srujanika@gmail.com

~~8-1578002~~

+2.8 : A9512

*C. tribulus*

*adspict* : *med*

1151 : ad 195

7      8      9

20-F 14925