OBJECT ORIENTED PROGRAMING LAB

Experiment No.: 14

Name : Swetha Prakash

Roll No : 46

Batch : B

Date : 17-05-22

Aim

Create classes Student and Sports. Create another class Result inherited from Student and Sports. Display the academic and sports score of a student.

Source Code

```
import java.util.*;

import java.io.*;


interface Sports {

    public void sports_getData();


    public void sports_dispData();

}


class Student {

    String name;

    int roll_no;

    float mark1, mark2;


    Student(String n, int r, float m1, float m2) {

        name = n;

        roll_no = r;

        mark1 = m1;
```

```java
        mark2 = m2;

    }


    void display() {

        System.out.println("\n****Student Details****");

        System.out.println("Name of the Student : " + name);

        System.out.println("Roll No. of the Student : " + roll_no);

        System.out.println("Marks of Subject 1 : " + mark1);

        System.out.println("Marks of Subject 2 : " + mark2);

    }

}


class Result extends Student implements Sports {

    int r;

    String item;

    Scanner sc = new Scanner(System.in);


    Result(String n, int r, float m1, float m2) {

        super(n, r, m1, m2);

    }


    public void academic() {

        float total = (mark1 + mark2);

        float percent = total * 100 / 200;

        System.out.println("\n----Academic Info----");

        System.out.println("Percentage : " + percent + "%");

    }


    public void sports_getData() {
```
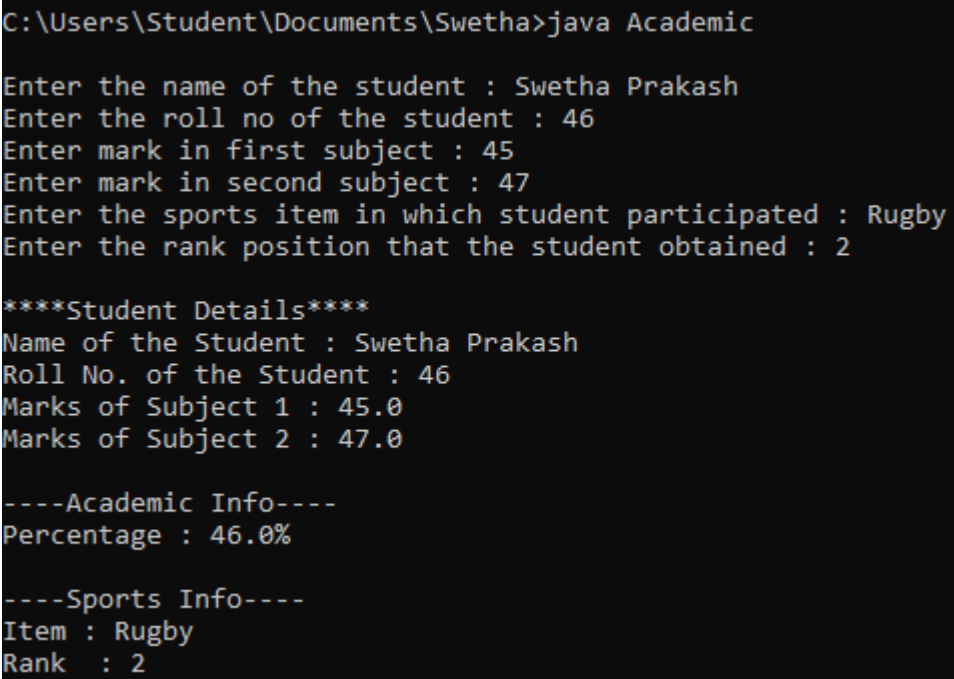
```java
        System.out.print("Enter the sports item in which student participated : ");

        item = sc.nextLine();

        System.out.print("Enter the rank position that the student obtained : ");

        r = sc.nextInt();

    }


    public void sports_dispData() {

        System.out.println("\n----Sports Info----");

        System.out.println("Item : " + item);

        System.out.println("Rank  : " + r);

    }
}


class Academic {
    public static void main(String args[]) throws IOException {

        InputStreamReader isr = new InputStreamReader(System.in);

        BufferedReader br = new BufferedReader(isr);

        System.out.print("\nEnter the name of the student : ");

        String n = br.readLine();

        System.out.print("Enter the roll no of the student : ");

        int roll = Integer.parseInt(br.readLine());

        System.out.print("Enter mark in first subject : ");

        float m1 = Float.parseFloat(br.readLine());

        System.out.print("Enter mark in second subject : ");

        float m2 = Float.parseFloat(br.readLine());

        Result re = new Result(n, roll, m1, m2);

        re.sports_getData();

        re.display();

        re.academic();
```

```
        re.sports_dispData();

    }

}
```

Output Screenshot

```
C:\Users\Student\Documents\Swetha>java Academic

Enter the name of the student : Swetha Prakash
Enter the roll no of the student : 46
Enter mark in first subject : 45
Enter mark in second subject : 47
Enter the sports item in which student participated : Rugby
Enter the rank position that the student obtained : 2

****Student Details****
Name of the Student : Swetha Prakash
Roll No. of the Student : 46
Marks of Subject 1 : 45.0
Marks of Subject 2 : 47.0

----Academic Info----
Percentage : 46.0%

----Sports Info----
Item : Rugby
Rank  : 2
```