Write a Java program to create a class Student and create constructor which assigns the values for the student details such as student name, register number, and five subject marks. Calculate the total and average of five subject marks and display the marks and average.

CODE:

import java.util.Scanner;

class Student {

private String name;

private int regNumber;

private int[] subjectMarks;

// Constructor to initialize student details and subject marks

public Student(String name, int regNumber, int[] subjectMarks) {

this.name = name;

this.regNumber = regNumber;

this.subjectMarks = subjectMarks;

}

// Method to calculate total marks

public int calculateTotalMarks() {

int totalMarks = 0;

for (int mark : subjectMarks) {

totalMarks += mark;

}

return totalMarks;

}

// Method to calculate average marks

public double calculateAverageMarks() {

int totalMarks = calculateTotalMarks();

return (double) totalMarks / subjectMarks.length;

}

// Method to display student details and marks

public void displayStudentDetails() {

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

System.out.println("Register Number: " + regNumber);

System.out.println("Subject Marks:");

for (int i = 0; i < subjectMarks.length; i++) {

System.out.println("Subject " + (i + 1) + ": " + subjectMarks[i]);

}

System.out.println("Total Marks: " + calculateTotalMarks());

System.out.println("Average Marks: " + calculateAverageMarks());

}

}

public class StudDetails {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Input student details

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

String name = scanner.nextLine();

System.out.print("Enter register number: ");

int regNumber = scanner.nextInt();

// Input subject marks

int[] subjectMarks = new int[5];

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

for (int i = 0; i < subjectMarks.length; i++) {

System.out.print("Enter mark for subject " + (i + 1) + ": ");

subjectMarks[i] = scanner.nextInt();

}

// Create a Student object with input details

Student student = new Student(name, regNumber, subjectMarks);

// Display student details and marks

System.out.println("\nStudent Details:");

student.displayStudentDetails();

scanner.close(); // Closing the scanner object

}

}

OUTPUT:

C:\javap>javac StudDetails.java

C:\javap>java StudDetails

Enter student name: Likitha Dasaraju

Enter register number: 192110373

Enter subject marks:

Enter mark for subject 1: 70

Enter mark for subject 2: 45

Enter mark for subject 3: 20

Enter mark for subject 4: 89

Enter mark for subject 5: 67

Student Details:

Student Name: Likitha Dasaraju

Register Number: 192110373

Subject Marks:

Subject 1: 70

Subject 2: 45

Subject 3: 20

Subject 4: 89

Subject 5: 67

Total Marks: 291

Average Marks: 58.2

