import java.util.\*;

class Student {

private String name;

private int rollNumber;

private ArrayList<Integer> marks;

public Student(String name, int rollNumber) {

this.name = name;

this.rollNumber = rollNumber;

this.marks = new ArrayList<>();

}

public void addMark(int mark) {

marks.add(mark);

}

public double getAverage() {

int sum = 0;

for (int mark : marks) {

sum += mark;

}

return marks.size() > 0 ? (double) sum / marks.size() : 0;

}

public int getHighest() {

return Collections.max(marks);

}

public int getLowest() {

return Collections.min(marks);

}

public void displaySummary() {

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

System.out.println("Roll No: " + rollNumber);

System.out.println("Marks: " + marks);

System.out.printf("Average: %.2f\n", getAverage());

System.out.println("Highest Score: " + getHighest());

System.out.println("Lowest Score: " + getLowest());

System.out.println("-----------------------------------");

}

}

public class StudentGradeManager {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

ArrayList<Student> studentList = new ArrayList<>();

System.out.print("Enter number of students: ");

int studentCount = sc.nextInt();

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

System.out.println("\nEnter details for Student " + (i + 1) + ":");

sc.nextLine(); // consume newline

System.out.print("Name: ");

String name = sc.nextLine();

System.out.print("Roll Number: ");

int rollNumber = sc.nextInt();

Student student = new Student(name, rollNumber);

System.out.print("Enter number of subjects: ");

int subjectCount = sc.nextInt();

for (int j = 0; j < subjectCount; j++) {

System.out.print("Enter marks for Subject " + (j + 1) + ": ");

int mark = sc.nextInt();

student.addMark(mark);

}

studentList.add(student);

}

// Display summary report

System.out.println("\n=========== Summary Report ===========");

for (Student student : studentList) {

student.displaySummary();

}

sc.close();

}

}