import java.util.ArrayList;

import java.util.Scanner;

public class StudentGrades {

// Method to calculate the average of grades

public static double calculateAverage(ArrayList<Integer> grades) {

int sum = 0;

for (int grade : grades) {

sum += grade;

}

return sum / (double) grades.size();

}

// Method to find the highest grade

public static int findHighestGrade(ArrayList<Integer> grades) {

int highest = grades.get(0);

for (int grade : grades) {

if (grade > highest) {

highest = grade;

}

}

return highest;

}

// Method to find the lowest grade

public static int findLowestGrade(ArrayList<Integer> grades) {

int lowest = grades.get(0);

for (int grade : grades) {

if (grade < lowest) {

lowest = grade;

}

}

return lowest;

}

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

ArrayList<Integer> grades = new ArrayList<>();

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

int numStudents = scanner.nextInt();

// Input grades

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

System.out.print("Enter the grade for student " + (i + 1) + ": ");

int grade = scanner.nextInt();

grades.add(grade);

}

// Calculating average, highest and lowest grade

double average = calculateAverage(grades);

int highest = findHighestGrade(grades);

int lowest = findLowestGrade(grades);

// Displaying the results

System.out.println("Average Grade: " + average);

System.out.println("Highest Grade: " + highest);

System.out.println("Lowest Grade: " + lowest);

scanner.close();

}

}