Develop a program that allows a teacher to enter student grades and compute their average, higher and lowest score. You can use arrays or arraylists to store the student data.

import java.util.ArrayList;

import java.util.Scanner;

public class GradeCalculator {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

ArrayList<Double> grades = new ArrayList<>()

System.out.println("Welcome to the Grade Calculator!");

System.out.println("Enter student grades one by one. Type 'done' when you are finished.");

// Input grades

while (true) {

System.out.print("Enter a student's grade (or type 'done' to finish): ");

String input = scanner.nextLine();

if (input.equalsIgnoreCase("done")) {

break;

}

try {

double grade = Double.parseDouble(input);

grades.add(grade);

} catch (NumberFormatException e) {

System.out.println("Invalid input. Please enter a valid grade or 'done' to finish.");

}

}

// Calculate statistics

if (grades.isEmpty()) {

System.out.println("No grades were entered.");

} else {

double average = calculateAverage(grades);

double highest = calculateHighest(grades);

double lowest = calculateLowest(grades);

System.out.println("\nNumber of grades entered: " + grades.size());

System.out.println("Average grade: " + String.format("%.2f", average));

System.out.println("Highest grade: " + String.format("%.2f", highest));

System.out.println("Lowest grade: " + String.format("%.2f", lowest));

}

scanner.close();

}

private static double calculateAverage(ArrayList<Double> grades) {

double sum = 0;

for (double grade : grades) {

sum += grade;

}

return sum / grades.size();

}

private static double calculateHighest(ArrayList<Double> grades) {

double highest = Double.MIN\_VALUE;

for (double grade : grades) {

if (grade > highest) {

highest = grade;

}

}

return highest;

}

private static double calculateLowest(ArrayList<Double> grades) {

double lowest = Double.MAX\_VALUE;

for (double grade : grades) {

if (grade < lowest) {

lowest = grade;

}

}

return lowest;

}

}