package student.grade.tracker;

import java.util.ArrayList;

import java.util.Scanner;

public class StudentGradeTracker {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

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

String input;

// Input loop for grades

do {

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

input = scanner.nextLine();

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

try {

double grade = Double.parseDouble(input);

if (grade < 0 || grade > 100) {

System.out.println("Please enter a grade between 0 and 100.");

} else {

grades.add(grade);

}

} catch (NumberFormatException e) {

System.out.println("Invalid input. Please enter a valid number.");

}

}

} while (!input.equalsIgnoreCase("done"));

// Calculate statistics

if (grades.size() > 0) {

double sum = 0;

double highest = grades.get(0);

double lowest = grades.get(0);

for (double grade : grades) {

sum += grade;

if (grade > highest) {

highest = grade;

}

if (grade < lowest) {

lowest = grade;

}

}

double average = sum / grades.size();

// Output results

System.out.printf("Average grade: %.2f%n", average);

System.out.printf("Highest grade: %.2f%n", highest);

System.out.printf("Lowest grade: %.2f%n", lowest);

} else {

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

}

scanner.close();

}

}

