

#STUDENT GRADE TRACKER(TASK-2)

```
import java.util.ArrayList;
import java.util.Scanner;
public class StudentGradeTracker {
    public static double calculateAverage(ArrayList<Double> grades) {
        double sum = 0.0;
        for (double grade : grades) {
            sum += grade;
        }
        return sum / grades.size();
    }
    public static String getLetterGrade(double average) {
        if (average >= 90) {
            return "A";
        } else if (average >= 80) {
            return "B";
        } else if (average >= 70) {
            return "C";
        } else if (average >= 60) {
            return "D";
        } else {
            return "F";
        }
    }
    public static double calculateGPA(double average) {
        if (average >= 90) {
            return 4.0;
        } else if (average >= 80) {
            return 3.0;
        } else if (average >= 70) {
            return 2.0;
        } else if (average >= 60) {
            return 1.0;
        } else {
            return 0.0;
        }
    }
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        ArrayList<Double> grades = new ArrayList<>();
        System.out.println("Student Grade Tracker Program!");
        while (true) {
            System.out.print("Enter a grade (or type 'done' to finish): ");
            String input = scanner.next();
            if (input.equalsIgnoreCase("done")) {
                break;
            }
            try {
                double grade = Double.parseDouble(input);
                if (grade >= 0 && grade <= 100) {
                    grades.add(grade);
                } else {
                    System.out.println("Please enter a grade between 0 and 100.");
                }
            } catch (NumberFormatException e) {
```

```
        System.out.println("Invalid input. Please enter a valid grade or 'done' to finish.");
    }
}
if (grades.isEmpty()) {
    System.out.println("No grades were entered.");
} else {
    double average = calculateAverage(grades);
    String letterGrade = getLetterGrade(average);
    double gpa = calculateGPA(average);
    System.out.printf("Average Grade: %.2f%n", average);
    System.out.println("Letter Grade: " + letterGrade);
    System.out.printf("GPA: %.2f%n", gpa);
}
scanner.close();
}
}
```

#OUTPUT

Student Grade Tracker Program!

Enter a grade (or type 'done' to finish): 98

Enter a grade (or type 'done' to finish): 94

Enter a grade (or type 'done' to finish): 93

Enter a grade (or type 'done' to finish): done

Average Grade: 95.00

Letter Grade: A

GPA: 4.00