```
import java.util.ArrayList;
import java.util.Scanner;

public class StudentGrades {

    public static void main(String[] args) {
        ArrayList<Integer> grades = new ArrayList<>();
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter grades for students (type 'done' to finish):");

        while (true) {
            String input = scanner.next();
            if (input.equalsIgnoreCase("done")) {
                break;
            }
            try {
                int grade = Integer.parseInt(input);
                grades.add(grade);
            } catch (NumberFormatException e) {
                System.out.println("Invalid input. Please enter a valid grade or 'done' to finish.");
            }
        }

        if (grades.size() == 0) {
            System.out.println("No grades entered.");
```

```
            return;
        }

        int sum = 0;
        int highest = grades.get(0);
        int lowest = grades.get(0);

        for (int grade : grades) {
            sum += grade;
            if (grade > highest) {
                highest = grade;
            }
            if (grade < lowest) {
                lowest = grade;
            }
        }

        double average = (double) sum / grades.size();

        System.out.println("Average grade: " + average);
        System.out.println("Highest grade: " + highest);
        System.out.println("Lowest grade: " + lowest);
    }
}
```

Output:

java -cp /tmp/ZCJnaiD8OY/StudentGrades

Enter grades for students (type 'done' to finish):

99

56

87

45

64

75

36

69

done

Average grade: 68.42857142857143

Highest grade: 99

Lowest grade: 36

=== Code Execution Successful ===