Project 6:
Going to Extremes

Project 6:

- Write a program that reads up to ten integer values from the keyboard and outputs their extreme (maximum and minimum) and average values.
    - Show the average with four decimal places, using the DecimalFormatter class.
    - Trailing zeroes will not be shown.

- If the user enters a zero, stop asking for inputs and output the minimum, maximum, and average of the values that have been entered prior to that point.
    - If the first input is zero, output an error message.

- You may assume that the user will enter only valid integer values.
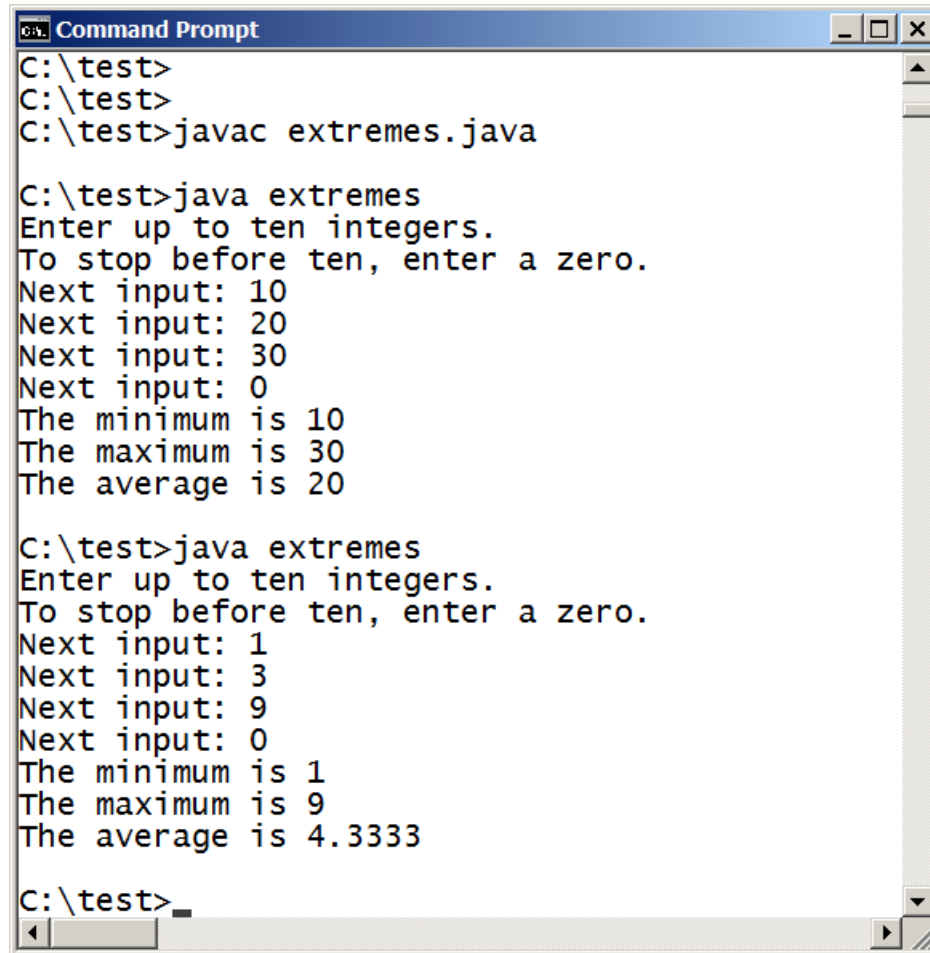   - Validating input values is not required.

Sample Runs

- Your output should be similar in format to that shown in the sample run shown on this and the following slides.


```
Command Prompt                                       _ □ ×
C:\test>
C:\test>
C:\test>javac extremes.java

C:\test>java extremes
Enter up to ten integers.
To stop before ten, enter a zero.
Next input: 1
Next input: 1
Next input: 1
Next input: 5
Next input: 5
Next input: 5
Next input: 10
Next input: 10
Next input: 20
Next input: 17
The minimum is 1
The maximum is 20
The average is 7.5

C:\test>_
```

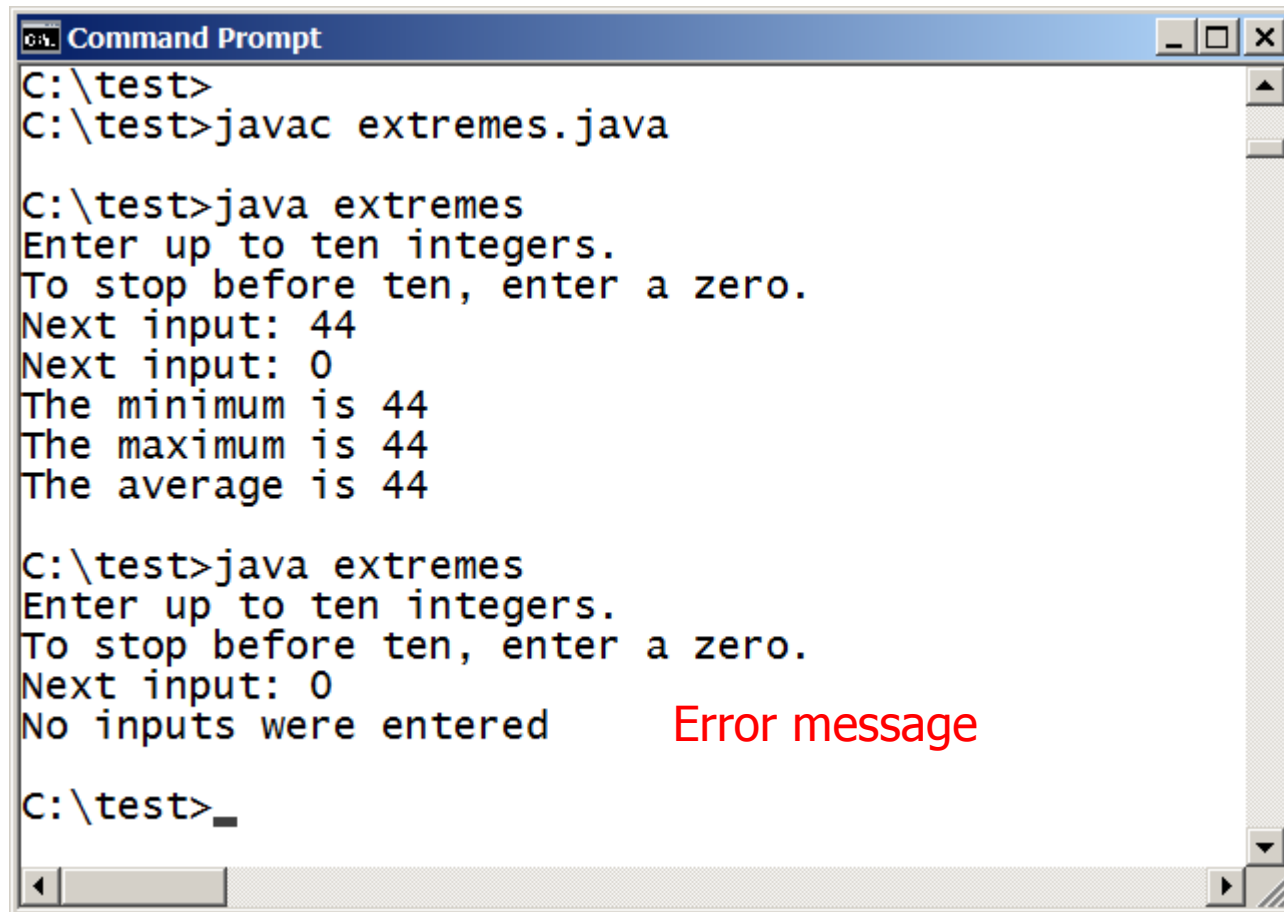Note that trailing zeroes are not shown in the average.

Sample Runs


```
Command Prompt                                          _ □ ×
C:\test>
C:\test>
C:\test>javac extremes.java

C:\test>java extremes
Enter up to ten integers.
To stop before ten, enter a zero.
Next input: 10
Next input: 20
Next input: 30
Next input: 0
The minimum is 10
The maximum is 30
The average is 20

C:\test>java extremes
Enter up to ten integers.
To stop before ten, enter a zero.
Next input: 1
Next input: 3
Next input: 9
Next input: 0
The minimum is 1
The maximum is 9
The average is 4.3333

C:\test>
```

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Sample Runs

```
Command Prompt                                          _ □ ×
C:\test>
C:\test>javac extremes.java

C:\test>java extremes
Enter up to ten integers.
To stop before ten, enter a zero.
Next input: 44
Next input: 0
The minimum is 44
The maximum is 44
The average is 44

C:\test>java extremes
Enter up to ten integers.
To stop before ten, enter a zero.
Next input: 0
No inputs were entered      Error message

C:\test>_
```

Submission

- Put your Java source file into a folder and zip it.
- Submit your zipped Java source file via Canvas Assignments.

- Project is due by 11:59 PM
  - Sunday, February 14 Sections 001 and 002
  - Monday, February 15 Sections 003 and 004

Ground Rules

- It is OK to *discuss* the project with other students BUT
  - Do not share your code with other students.
  - Before or after submitting the project.

- Do not copy any other student's code.
  - Or even look at it.

- Do not let anyone copy or examine your code.

Ground Rules

Except for code posted on the class web site

- Do not copy code from the Internet
    - or any other source (other than the textbook.)

- Do not ask for help on an Internet forum.
    - If you need help, ask your instructor or a TA.
    - Come to lab and help sessions.

- Write your own code.