Define the Problem

Scan for an input from the user. Store the input into an array. Visually display the number of asterisks given the user input value.

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| BarChart |
| -barArray:int[]  -SIZE:int final  -ASTERISK:String final |
| <<constructor>>+BarChart(val:int[])  +draw(g2:Graphics2D):void |

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| BarChartComponent |
| -values:int[] |
| <<constructor>>+BarChartComponent(val:int[])  +paintComponent(g:Graphics):void |

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| BarChartViewer |
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| +main(args:String[]):void |

Algorithm

Main

1. Create InputDialog to accept user input five times and store input into array.
2. Create frame
3. Create an instance of BarChartComponent
4. Add component to the frame
5. Set frame visibility to true

BarChartComponent

1. Assign val to values

paintComponent

1. Cast g to Graphics2D
2. Create instance of BarChart
3. Draw BarChart

BarChart

1. Assign val to barArray

draw

1. Declare X and Y coordinates and initialize values.
2. Create a loop (5x – size of the array)
3. Read the values stored in the array
4. Create a nested loop (Number stored in the array)
5. Use drawString to display an asterisk for each value of each element using X and Y coordinates
6. Increase X and Y coordinates for each loop