**AP - Chap 10 - Statistics**

Create a class that stores an array to emulate rolling three 6-sided die 1000 times.

Methods should include:

public double calcAvg() { . . . } //returns the average of the 1000 elements

public int getMin() { . . . } //returns the lowest number in the array

public int getMax() { . . . } //returns the highest number in the array

public double calcStdDev() { . . . }

//returns the standard deviation using values from the array and calculated

//from the following formula



public void displayHistogram() { . . . }

//1. instantiates populates an 18 element array that is local to the

//method and represents the frequency of each total of the rolls of 3 dice

//2. Displays a histogram based on the frequency

//3. The histogram should display 1 asterisk for every 5 or portion of

//An example of a frequency table and histogram are shown below

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| freq[3] | freq[4] | freq[5] | freq[6] | freq[7] |
| 1 | 16 | 28 | 12 | 0 |

3 | \*

4 | \*\*\*\*

5 | \*\*\*\*\*\*

6 | \*\*\*

7 |

public String toString() { . . . } //displays the 1000 element array in a

//25 X 40 grid