

Lab 1

Direction: Submit the typed source code.

Class Statistics

For this lab, you will be evaluating the class from assignment 1. To recap, a student's record consists of the following assignments:

Assignments	<i>Homework 1</i>	<i>Homework 2</i>	<i>Homework 3</i>	<i>Homework 4</i>	<i>Homework 5</i>	<i>Homework 6</i>	<i>Homework 7</i>	<i>Homework 8</i>	<i>Homework 9</i>	<i>Homework 10</i>	<i>Quiz 1</i>	<i>Quiz 2</i>	<i>Quiz 3</i>	<i>Quiz 4</i>	<i>Quiz 5</i>	<i>Midterm</i>	<i>Final</i>
Indices	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

You will have to complete the following code.

I.

Name:	Sort()
Parameter(s):	float[] : <i>data</i> int : <i>size</i>
Return:	nothing
Description:	sorts the elements of <i>data</i> whose size is <i>size</i> in ascending order.

II.

Name:	Maximum()
Parameter(s):	float[] : <i>data</i> int : <i>size</i>
Return:	float
Description:	returns the largest element of <i>data</i> whose size is <i>size</i> .

III.

Name:	Minimum()
Parameter(s):	float[] : <i>data</i> int : <i>size</i>
Return:	float
Description:	returns the smallest element of <i>data</i> whose size is <i>size</i> .

IV.

Name:	Range()
Parameter(s):	float[] : <i>data</i> int : <i>size</i>
Return:	float
Description:	returns the distance between the smallest and largest elements of <i>data</i> whose size is <i>size</i> .

V.

Name:	Median()
Parameter(s):	float[] : <i>data</i> int : <i>size</i>
Return:	float
Description:	returns the median of elements of <i>data</i> whose size is <i>size</i> . If an ordered list has an odd number of elements, the median is the middle number; otherwise, it is the average of the two middle numbers.

VI.

Name:	Mean()
Parameter(s):	float[] : <i>data</i> int : <i>size</i>
Return:	float
Description:	returns the average of elements of <i>data</i> whose size is <i>size</i> .

VII.

Name:	StandardDeviation()
Parameter(s):	float[] : <i>data</i> int : <i>size</i>
Return:	float
Description:	returns the standard deviation of elements of <i>data</i> whose size is <i>size</i> .

VIII.

Name:	OutlinerCount()
Parameter(s):	float[] : <i>data</i> int : <i>size</i>
Return:	float
Description:	returns the number of elements of <i>data</i> whose size is <i>size</i> that are outliers. An outlier is a values whose z-score is either less than -2 or greater than 2.

Type	Task	Problem Set
Γ	A	{I, II, V, VI}
	B	{III, IV, VII, VIII}
Θ	A	{I, VI}
	B	{II, III, IV, V}
	C	{VII, VIII}
Λ	A	{I, III}
	B	{II, VII}
	C	{IV, VIII}
	D	{V, VI}