

HW2 Bonus

1st Run

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myang5@cscd-linux01: ~/CSCD240/HW2
myang5@cscd-linux01:~/CSCD240/HW2$ gcc -o SortModifyArray_test SortModifyArrayBonus.c -lm
myang5@cscd-linux01:~/CSCD240/HW2$ ./SortModifyArray_test
This is the basic part of the program that asks the user to type the number of integers, i.e.,
'n'. Next, allocate memory for 'n' integers, read the values of 'n' integers into the allocat
ed memory using scanf; next, find the mean, median and average of 'n' integers. Lastly, the a
llocated memory needs to be freed.
Typing the number: 5
Displaying the numbers typed so far:
{ 5 }
Mean of the numbers is: 5.000000
Median of the numbers is: 5.000000
Standard deviation of the numbers is: 0.000000
8
Typing the number: 8
Displaying the numbers typed so far:
{ 5, 8 }
Mean of the numbers is: 6.500000
Median of the numbers is: 7.500000
Standard deviation of the numbers is: 2.121320
2
Typing the number: 2
Displaying the numbers typed so far:
{ 5, 8, 2 }
Mean of the numbers is: 5.000000
Median of the numbers is: 5.000000
Standard deviation of the numbers is: 3.000000
3
Typing the number: 3
Displaying the numbers typed so far:
{ 2, 5, 8, 3 }
Mean of the numbers is: 4.500000
Median of the numbers is: 4.500000
Standard deviation of the numbers is: 2.645751
myang5@cscd-linux01:~/CSCD240/HW2$
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2nd Run

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myang5@cscd-linux01: ~/CSCD240/HW2
myang5@cscd-linux01:~/CSCD240/HW2$ gcc -o SortModifyArray_test SortModifyArrayBonus.c -lm
myang5@cscd-linux01:~/CSCD240/HW2$ ./SortModifyArray_test
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'n'. Next, allocate memory for 'n' integers, read the values of 'n' integers into the allocat
ed memory using scanf; next, find the mean, median and average of 'n' integers. Lastly, the a
llocated memory needs to be freed.
Typing the number: 10
Displaying the numbers typed so far:
{ 10 }
Mean of the numbers is: 10.000000
Median of the numbers is: 10.000000
Standard deviation of the numbers is: 0.000000
13
Typing the number: 13
Displaying the numbers typed so far:
{ 10, 13 }
Mean of the numbers is: 11.500000
Median of the numbers is: 12.500000
Standard deviation of the numbers is: 2.121320
18
Typing the number: 18
Displaying the numbers typed so far:
{ 10, 13, 18 }
Mean of the numbers is: 13.666667
Median of the numbers is: 13.000000
Standard deviation of the numbers is: 4.041452
32
Typing the number: 32
Displaying the numbers typed so far:
{ 10, 13, 18, 32 }
Mean of the numbers is: 18.250000
Median of the numbers is: 17.500000
Standard deviation of the numbers is: 9.742518
myang5@cscd-linux01:~/CSCD240/HW2$
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3rd Run

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myang5@cscd-linux01: ~/CSCD240/HW2
myang5@cscd-linux01:~/CSCD240/HW2$ gcc -o SortModifyArray_test SortModifyArrayBonus.c -lm
myang5@cscd-linux01:~/CSCD240/HW2$ ./SortModifyArray_test
This is the basic part of the program that asks the user to type the number of integers, i.e.,
'n'. Next, allocate memory for 'n' integers, read the values of 'n' integers into the allocated
memory using scanf; next, find the mean, median and average of 'n' integers. Lastly, the allocated
memory needs to be freed.
Typing the number: 100
Displaying the numbers typed so far:
{ 100 }
Mean of the numbers is: 100.000000
Median of the numbers is: 100.000000
Standard deviation of the numbers is: 0.000000
320
Typing the number: 320
Displaying the numbers typed so far:
{ 100, 320 }
Mean of the numbers is: 210.000000
Median of the numbers is: 319.500000
Standard deviation of the numbers is: 155.563492
351
Typing the number: 23
Displaying the numbers typed so far:
{ 100, 320, 23 }
Mean of the numbers is: 147.666667
Median of the numbers is: 100.000000
Standard deviation of the numbers is: 154.130897
1234
Typing the number: 32
Displaying the numbers typed so far:
{ 23, 100, 320, 32 }
Mean of the numbers is: 118.750000
Median of the numbers is: 99.500000
Standard deviation of the numbers is: 138.500000
myang5@cscd-linux01:~/CSCD240/HW2$
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