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1   afterlyte@Spectre:/mnt/c/Users/xj123/OneDrive/Documents/School/CSCD/CSCD240/hw/hw2$ gcc
    SortModifyArrayBonus.c -o arraytest -lm
2   afterlyte@Spectre:/mnt/c/Users/xj123/OneDrive/Documents/School/CSCD/CSCD240/hw/hw2$
    ./arraytest
3   Bonus version of the program. This program can read as many integers as the user types
    and keeps on displaying the cumulative mean, median and average of the numbers typed so
    far. Lastly, the allocated memory needs to be freed.
4   Typing the number:
5   1
6   Displaying the numbers:
7   1
8   Mean of the numbers is: 1.000000
9   Median of the numbers is: 1.000000
10  Number list too small to calculate standard deviation.
11  Typing the number:
12  2
13  Displaying the numbers:
14  1 2
15  Mean of the numbers is: 1.500000
16  Median of the numbers is: 1.500000
17  Standard deviation of the numbers is: 0.707107
18  Typing the number:
19  3
20  Displaying the numbers:
21  1 2 3
22  Mean of the numbers is: 2.000000
23  Median of the numbers is: 2.000000
24  Standard deviation of the numbers is: 1.000000
25  Typing the number:
26  4
27  Displaying the numbers:
28  1 2 3 4
29  Mean of the numbers is: 2.500000
30  Median of the numbers is: 2.500000
31  Standard deviation of the numbers is: 1.290994
32  Typing the number:
33  5
34  Displaying the numbers:
35  1 2 3 4 5
36  Mean of the numbers is: 3.000000
37  Median of the numbers is: 3.000000
38  Standard deviation of the numbers is: 1.581139
39  Typing the number:
40  6
41  Displaying the numbers:
42  1 2 3 4 5 6
43  Mean of the numbers is: 3.500000
44  Median of the numbers is: 3.500000
45  Standard deviation of the numbers is: 1.870829
46  Typing the number:
47  3
48  Displaying the numbers:
49  1 2 3 4 5 6 3
50  Mean of the numbers is: 3.428571
51  Median of the numbers is: 3.000000
52  Standard deviation of the numbers is: 1.718249
53  Typing the number:
54  5
55  Displaying the numbers:
56  1 2 3 4 5 6 3 5
57  Mean of the numbers is: 3.625000
58  Median of the numbers is: 3.500000
59  Standard deviation of the numbers is: 1.685018
60  Typing the number:
61  2
62  Displaying the numbers:
63  1 2 3 4 5 6 3 5 2
64  Mean of the numbers is: 3.444444
65  Median of the numbers is: 3.000000
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 66    Standard deviation of the numbers is: 1.666667
 67    Typing the number:
 68    3
 69    Displaying the numbers:
 70    1 2 3 4 5 6 3 5 2 3
 71    Mean of the numbers is: 3.400000
 72    Median of the numbers is: 3.000000
 73    Standard deviation of the numbers is: 1.577621
 74    Typing the number:
 75    afterlyte@Spectre:/mnt/c/Users/xj123/OneDrive/Documents/School/CSCD/CSCD240/hw/hw2$
 76
 77    ----------
 78
 79    afterlyte@Spectre:/mnt/c/Users/xj123/OneDrive/Documents/School/CSCD/CSCD240/hw/hw2$
       ./arraytest
 80    Bonus version of the program. This program can read as many integers as the user types
       and keeps on displaying the cumulative mean, median and average of the numbers typed so
       far. Lastly, the allocated memory needs to be freed.
 81    Typing the number:
 82    23
 83    Displaying the numbers:
 84    23
 85    Mean of the numbers is: 23.000000
 86    Median of the numbers is: 23.000000
 87    Number list too small to calculate standard deviation.
 88    Typing the number:
 89    7438
 90    Displaying the numbers:
 91    23 7438
 92    Mean of the numbers is: 3730.500000
 93    Median of the numbers is: 3730.500000
 94    Standard deviation of the numbers is: 5243.196782
 95    Typing the number:
 96    38
 97    Displaying the numbers:
 98    23 7438 38
 99    Mean of the numbers is: 2499.666667
100    Median of the numbers is: 38.000000
101    Standard deviation of the numbers is: 4276.728695
102    Typing the number:
103    2
104    Displaying the numbers:
105    23 7438 38 2
106    Mean of the numbers is: 1875.250000
107    Median of the numbers is: 30.500000
108    Standard deviation of the numbers is: 3708.529392
109    Typing the number:
110    53
111    Displaying the numbers:
112    23 7438 38 2 53
113    Mean of the numbers is: 1510.800000
114    Median of the numbers is: 38.000000
115    Standard deviation of the numbers is: 3313.459174
116    Typing the number:
117    289
118    Displaying the numbers:
119    23 7438 38 2 53 289
120    Mean of the numbers is: 1307.166667
121    Median of the numbers is: 45.500000
122    Standard deviation of the numbers is: 3005.330026
123    Typing the number:
124    afterlyte@Spectre:/mnt/c/Users/xj123/OneDrive/Documents/School/CSCD/CSCD240/hw/hw2$
125
126    ----------
127
128    afterlyte@Spectre:/mnt/c/Users/xj123/OneDrive/Documents/School/CSCD/CSCD240/hw/hw2$
       ./arraytest
129    Bonus version of the program. This program can read as many integers as the user types
       and keeps on displaying the cumulative mean, median and average of the numbers typed so
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         far. Lastly, the allocated memory needs to be freed.
130      Typing the number:
131      0
132      Displaying the numbers:
133      0
134      Mean of the numbers is: 0.000000
135      Median of the numbers is: 0.000000
136      Number list too small to calculate standard deviation.
137      Typing the number:
138      0
139      Displaying the numbers:
140      0 0
141      Mean of the numbers is: 0.000000
142      Median of the numbers is: 0.000000
143      Standard deviation of the numbers is: 0.000000
144      Typing the number:
145      0
146      Displaying the numbers:
147      0 0 0
148      Mean of the numbers is: 0.000000
149      Median of the numbers is: 0.000000
150      Standard deviation of the numbers is: 0.000000
151      Typing the number:
152      1
153      Displaying the numbers:
154      0 0 0 1
155      Mean of the numbers is: 0.250000
156      Median of the numbers is: 0.000000
157      Standard deviation of the numbers is: 0.500000
158      Typing the number:
159      3
160      Displaying the numbers:
161      0 0 0 1 3
162      Mean of the numbers is: 0.800000
163      Median of the numbers is: 0.000000
164      Standard deviation of the numbers is: 1.303840
165      Typing the number:
166      5
167      Displaying the numbers:
168      0 0 0 1 3 5
169      Mean of the numbers is: 1.500000
170      Median of the numbers is: 0.500000
171      Standard deviation of the numbers is: 2.073644
172      Typing the number:
173      2
174      Displaying the numbers:
175      0 0 0 1 3 5 2
176      Mean of the numbers is: 1.571429
177      Median of the numbers is: 1.000000
178      Standard deviation of the numbers is: 1.902379
179      Typing the number:
180      6
181      Displaying the numbers:
182      0 0 0 1 3 5 2 6
183      Mean of the numbers is: 2.125000
184      Median of the numbers is: 1.500000
185      Standard deviation of the numbers is: 2.356602
186      Typing the number:
187      afterlyte@Spectre:/mnt/c/Users/xj123/OneDrive/Documents/School/CSCD/CSCD240/hw/hw2$
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