wk2-Implementing Selection Sort

Saturday, December 12, 2020 6:40 PM

Congratulations! You passed!
TO PASS 65% or higher

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100%

Implementing Selection Sort

TOTAL POINTS 5

1. For the assignment you wrote the method **sortByLargestDepth** in the class QuakeSortInPlace to sort earthquakes by their depth from largest depth to smallest depth using the selection sort algorithm. Modify this method to do exactly 50 passes and then modify the **testSort** method to run this method on the file **earthQuakeDataDec6sample1.atom**. The file may not be completely sorted as there are more than 50 quakes in the file. **1 / 1 point**

   After running your program of 50 selection sort passes on this file, what is the depth of the last earthquake in the ArrayList?

   -20021.00

   Correct

2. For the assignment you wrote the method **sortByMagnitudeWithCheck** in the class QuakeSortInPlace to sort earthquakes by their magnitude from smallest to largest using the selection sort algorithm, and stopping once the ArrayList is sorted. Modify **testSort** to run this method on the file **earthQuakeDataDec6sample2.atom**. Make sure you are using the updated (1/12/16) version of the EarthQuakeParser class. **1 / 1 point**

   How many passes are needed to sort this file?

   77

   Correct

3. For the assignment you wrote the method **sortByMagnitudeWithBubbleSortWithCheck** in the class QuakeSortInPlace to sort earthquakes by their magnitude from smallest to largest using the bubble sort algorithm, and stopping once the ArrayList is sorted. Modify **testSort** to run this method on the file **earthQuakeDataDec6sample2.atom**. **1 / 1 point**

   How many passes are needed to sort this file?

   67

   Correct

4. Consider the following ArrayList of six integers. 1 / 1 point

7 3 2 8 1 4

What does this ArrayList look like after two passes of selection sort that sorts the elements in numeric order from smallest to largest?

- 1 2 3 4 7 8
- 1 2 3 8 7 4
- 1 3 2 8 7 4
- 2 3 1 4 7 8
- 1 2 7 3 4 8
- 7 3 2 8 1 4

Correct

Here are the selection sort passes for this example. Three passes are needed.

7 3 2 8 1 4

1 3 2 8 7 4

1 2 3 8 7 4

1 2 3 4 7 8

5. Consider the following ArrayList of six integers. 1 / 1 point

7 3 2 8 1 4

What does this ArrayList look like after two passes of bubble sort that sorts the elements in numeric order from smallest to largest?

- 7 3 2 8 1 4
- 2 3 1 4 7 8
- 3 2 7 1 4 8
- 3 2 1 7 4 8
- 2 1 3 4 7 8
- 2 3 4 1 7 8

Correct

Here are the passes for bubble sort.

7 3 2 8 1 4

3 2 7 1 4 8

2 3 1 4 7 8

2 1 3 4 7 8

```
123478
```