CSC112 – Spring 2021 Lab #6 Gradesheet

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Note: Do not grade work submitted with compiler errors. Code with compiler errors is late, and must be fixed by the student before we will grade it.

1. main method in Main class (15 points - 5points each)
   1. ArrayList is a class member - Yes
   2. reflects big logic - Yes
   3. calls methods -Yes
2. Input File processed in separate Main method (18 points – 3pts each)
   1. read the name of the file or hard coded it - Yes
   2. Open FileReader wrap in Scanner - Yes
   3. try-catch associated with open - Yes
   4. UseDelimiter(",") or any string parser or the substring and indexof - Yes
   5. while (scanner detects input available) - Yes
3. scan each item as a string
4. try convert numerical data (sepal *length, sepal width, petal length, petal width*) *catch*

iii. add new Iris(....) to ArrayList

* 1. close file – No (-3)

Also student did not process file in method separate from the main (-2)

3. Class Iris (12 points - 3points each )

1. Include all data members (sepal *length, sepal width, petal length, petalwidth, species*)- Yes
2. compareTo method - Yes
3. isLessThan method - Yes

4. Mergesort Method (12 points– 4points each)

* 1. if statement for the base case - Yes
  2. 2 recursive calls with the correct parameters - Yes
  3. call for mergeSortedList with the correct parameters - Yes

1. MergeSortedList (20 points - 5points each)
   1. the first loop for merging the two sub-arrays - Yes
   2. the second loop to move the leftovers from the first sub-array to tmp - Yes
   3. the third loop to move the leftovers from the second sub-array to tmp - Yes
   4. the last loop to copy the tmp to the original array a - Yes
2. BubbleSort (8 points - 2points each)
   1. the outer loop has the correct condition - Yes
   2. the inner loop has the correct condition - Yes
   3. if statement for comparing each adjacent pair of Iris objects - Yes
   4. the swap process - Yes
3. Time complexity analysis (15 points – 5 point pieces)
   1. a paragraph to analyze the results using Big O and the execution time - Yes
   2. a graph for mergesort - Yes
   3. a graph for bubble sort - Yes
4. Readibility (0=OK/-5=Needs More/-10=Offensive)

Comments: Great Work!

Overall: 95 / 100