CS310 Data Structures
Java Programming Assignment 7 Rubric

Java Program:				
Rating **Rating Category**	**Exemplary**	**Partially Proficient**	**Basic (needs work)**	**Not Demonstrated**
Random List Generation	Random (unordered) lists are correctly re-generated for each of the three repeat cycles.	A few minor errors only.	Many minor errors, OR one or more major error(s).	Fails completely.
Pts	12	11 - 9	8 - 1	0
Sorting Implementation: Method 1	Demonstrates understanding of the bubble or slection sort and implements the sort correctly.	Sorts incorrectly, for a minor reason.	Sorts incorrectly, for multiple minor reasons, or for a major reason.	Sort not implemented at all
Pts	14	13 - 10	9 - 1	0
Sorting Implementation: Method 2	Demonstrates understanding of the insertion or shell sort and implements the sort correctly.	Sorts incorrectly, for a minor reason.	Sorts incorrectly, for multiple minor reasons, or for a major reason.	Sort not implemented at all
Pts	14	13 - 10	9 - 1	0
Sorting Implementation: Method 3	Demonstrates understanding of the merge or quick sort and implements the sort correctly.	Sorts incorrectly, for a minor reason.	Sorts incorrectly, for multiple minor reasons, or for a major reason.	Sort not implemented at all
Pts	14	13 - 10	9 - 1	0
Sort Validation	Validates that each sort produces a list in correct sorted order.	A few minor errors only.	Many minor errors, OR one or more major error(s).	Sorts not validated.
Pts	12	11 - 9	8 - 1	0
Timing Results	Timing results computed, stored, and output correctly. Averages computed and output correctly.	A few minor errors only.	Many minor errors, OR one or more major error(s).	Fails to output any timing results or averages.
Pts	12	11 - 9	8 - 1	0
Documentation	The program is well documented and clearly describes the purpose of the code.	Most of the documentation describes the purpose of the program and the comments are somewhat helpful.	Parts of the documentation / comments are helpful.	No documentation / comments are visible or the documentation is not helpful in describing the program.
Pts	10	9 - 7	6 - 2	1 - 0
Java Constructs / Readability / Miscellaneous	Demonstrates understanding of program structure. Code is organized and easy to follow, with no issues, and there is no unnecessary code.	There are minor construct, readability or other miscellaneous issues.	There are major construct, readability or other miscellaneous issues.	The code is extremely hard to read and follow.
Pts	10	9 - 7	6 - 2	1 - 0
Analysis of Sorting Methods	Analyzed results each sorting method, for 3 runs. Includes a logical conclusion.	Minor error(s) only.	Many minor errors, OR one or more major error(s).	Analysis not submitted.
Pts	14	13 - 11	10 - 1	0
Java Program SubTotal (any late points deducted will be based upon this subtotal)				
Deductions				
Delivery	Submitted on time	Submitted 1-2 days late (2% deducted per day late)	Submitted 3-5 days late (2% deducted per day late)	Not submitted within 5 days of due date
Late Deductions	0	–2% to –4%	–6% to –10%	–100% (no credit)
Points Grand Total	100			