

**FINAL REQUIREMENT AND FINAL LAB EXAM (TO BE PASS ON  
FINALS EXAMINATION WEEK)  
NOVEMBER 11, 2024 - NOVEMBER 16, 2024**

**NOTE: I WILL BE CHECKING THIS DAILY FOR YOUR  
ATTENDANCE**

LANGUAGE : JAVA

1. CREATE A BUBBLE SORT (EXPLAIN HOW THE SWAPPING WORKS)  
(25 POINTS)
2. CREATE A INSERTION SORT (EXPLAIN HOW THE SWAPPING WORKS)  
(25 POINTS)
3. CREATE A QUICK SORT (EXPLAIN HOW THE SWAPPING WORKS)  
(25 POINTS)
4. CREATE A MERGE SORT (EXPLAIN HOW THE SWAPPING WORKS)  
(25 POINTS)
5. FOR A BONUS POINT, CREATE HEAP SORT (EXPLAIN HOW THE SWAPPING WORKS)  
(BONUS 25 POINTS)

REFS:

<https://www.geeksforgeeks.org/bubble-sort-algorithm/> - BUBBLE SORT

<https://www.geeksforgeeks.org/insertion-sort-algorithm/> - INSERTION SORT

<https://www.geeksforgeeks.org/quick-sort-algorithm/> - QUICK SORT

<https://www.geeksforgeeks.org/merge-sort/> - MERGE SORT

FOR HEAP SORT FIND YOUR OWN REFERENCE