

COSC 3304 – Algorithms Design and Analysis

Assignment 4

Due: 23:59:00pm, 02/13/2024

1. (30 points) Please sort the input array [9 -9 15 35 -1 14 20 7] using the **MERGESORT** algorithm (please show detailed steps for full credits).
2. (30 points) Please use **HEASORT** to sort the input array [7 3 13 -3 26 8 10 33 17 -1 9] (please show detailed steps for full credits)
3. (40 points) Please sort the input array [9 -9 15 35 -1 14 20 7] using the **QUICKSORT** algorithm to output an increasing order array. The last element is the Pivot (please show detailed steps for full credits)