

Lab 6 Sorting

UWYO COSC 2030

1 Lab: Sorting

This lab will introduce you to some basic sorting algorithms. There will be three algorithms included in the lab: Quicksort, Mergesort, and Heapsort. Quicksort will already be completed for you; it is there for you to reference. Merge and Heap will need to be completed.

2 Lab: Assignment

Link: <https://classroom.github.com/a/4Wtp6ihE>

Complete the functions named heapify and mergesort. DO NOT change main or the function declarations. Start with a MAXSIZE set to be 100 (defined up top) to ensure you are sorting correctly, you can uncomment the print statements in main. Make sure you re-comment out the print statements after you ensure you are sorting correctly. Once you are sorting correctly, increase MAXSIZE up to 100,000 and run it again.

- Mergesort is missing the RECURSIVE calls
- Mergesort also needs to put the recursive calls together
- heapify also needs RECURSIVE calls

3 Timings

In your README, include the timings for each sorting algorithm for your computer, then go run it on a raspberry pi as well and record the timings. Submissions lacking timings will be docked up to 5 points. Please denote the MAXSIZE used for your timings. Warning, the pi's may not run with large numbers.

4 Turn in on Github. Make sure you include a readme with your name and lab section.