Jeremy Scheuerman

COSC 220

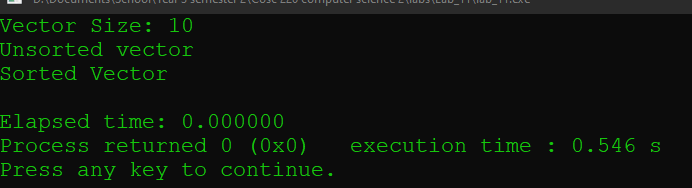
Dr. Wang

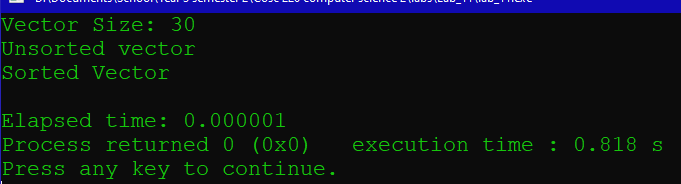
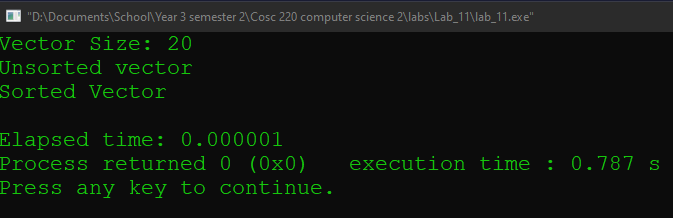
16 April 2021

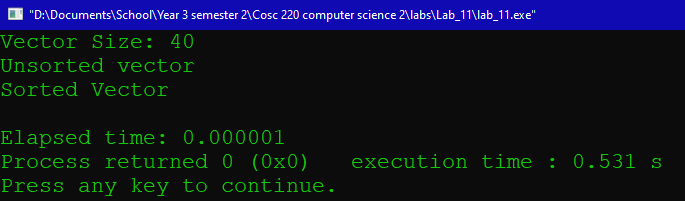
Lab 11 writeup

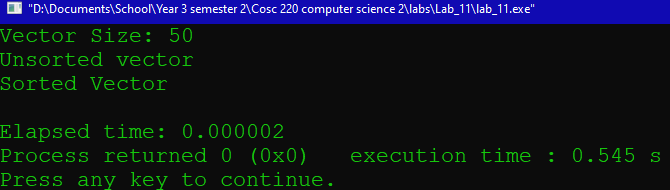
All times go to 6 decimal places (seconds)

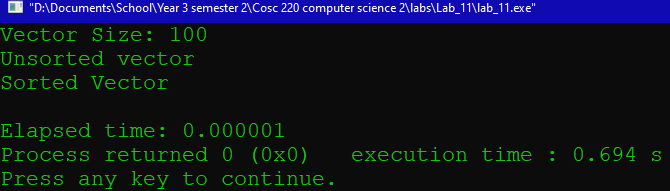
Bubble Sort

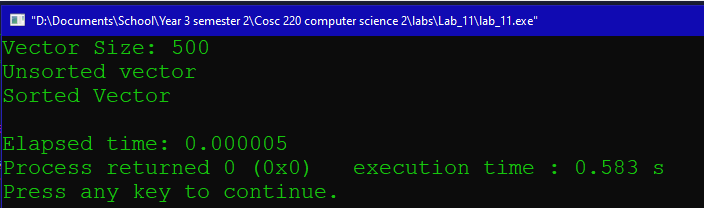


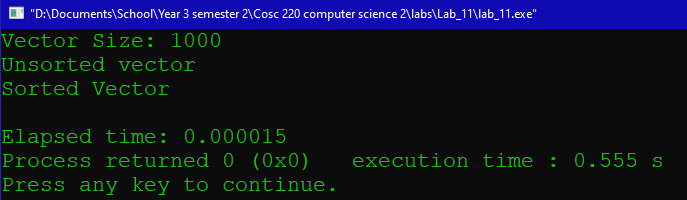


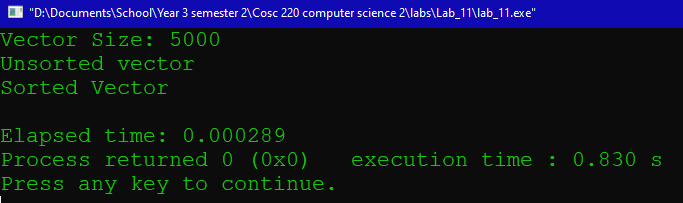


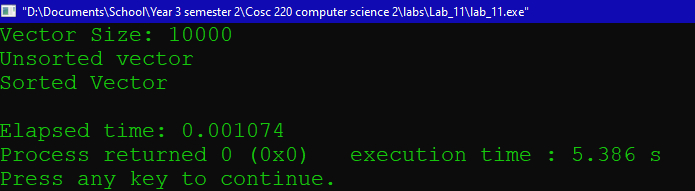




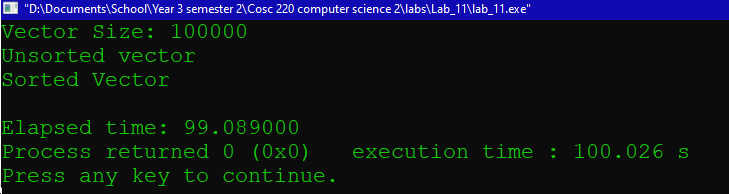


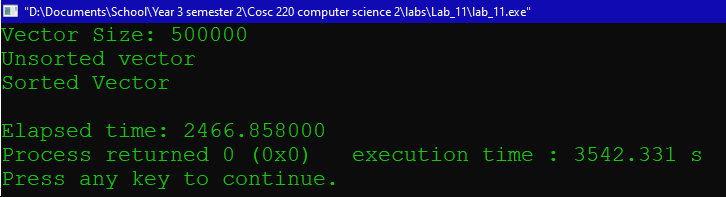




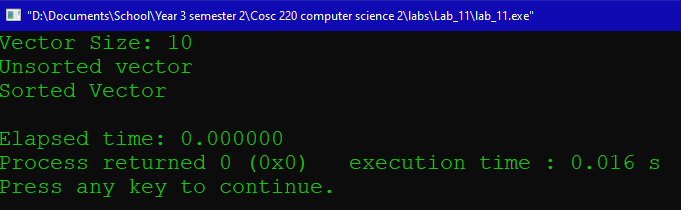


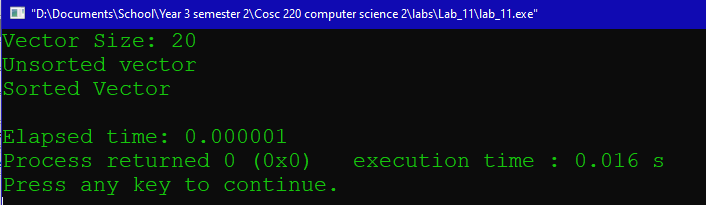
Removed divided by 1000 and running it 1000 times to cut back on time

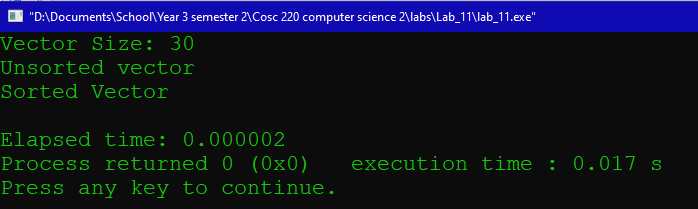


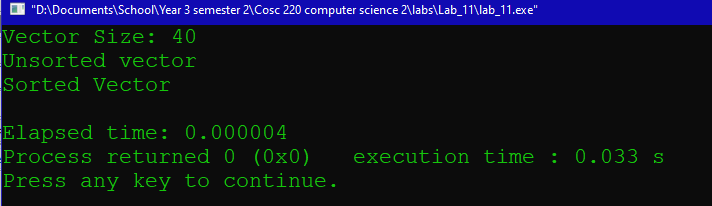


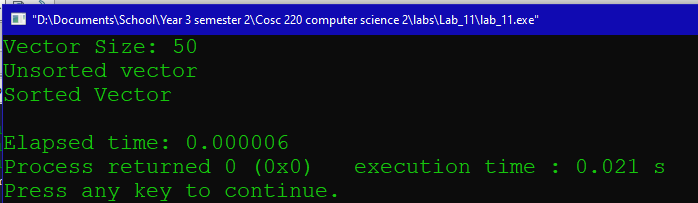
Insertion Sort

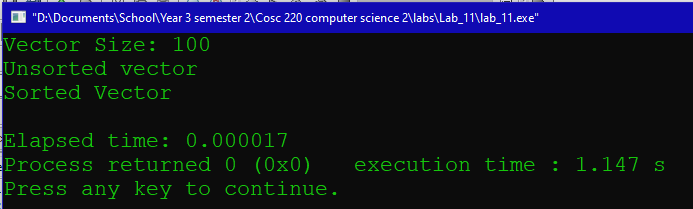


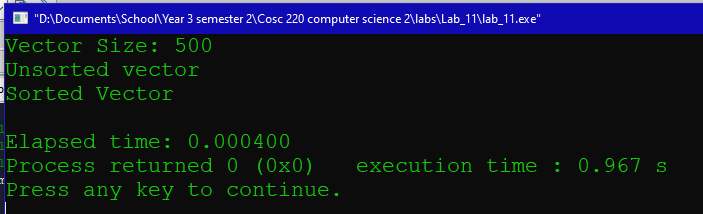


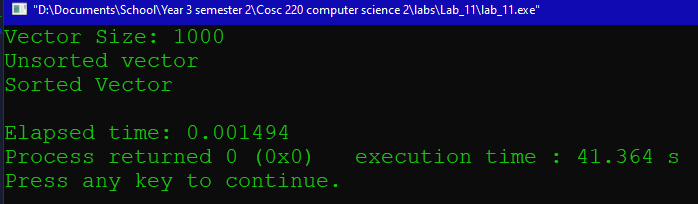




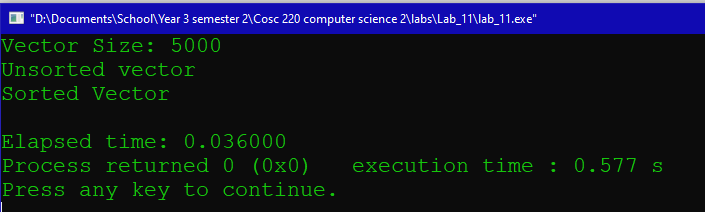


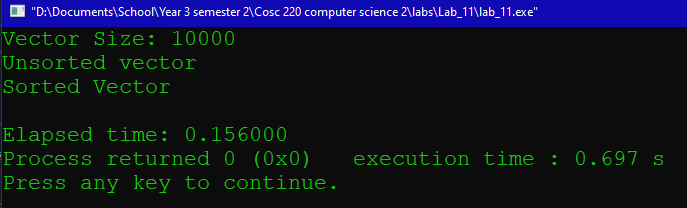


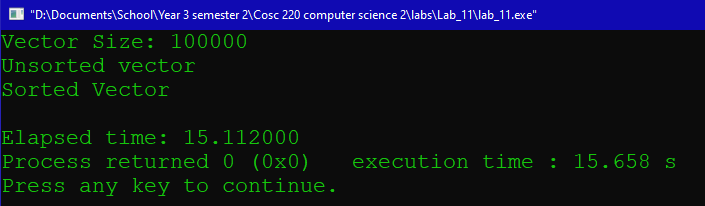


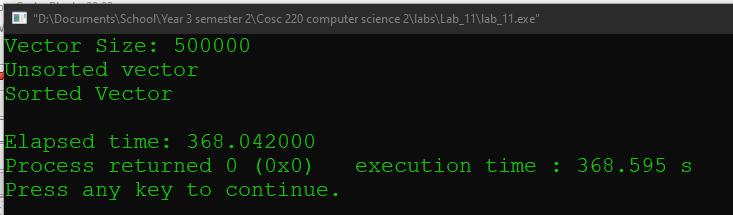


Stopped doing 1000 trials at this point

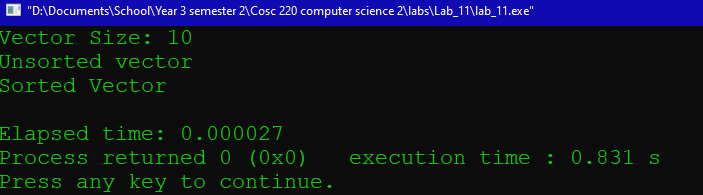


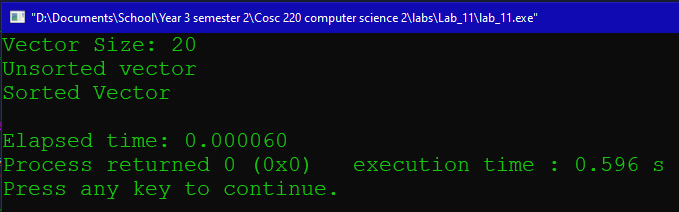


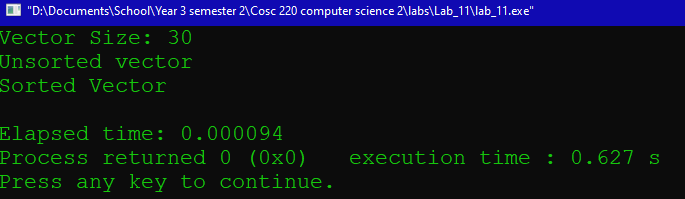


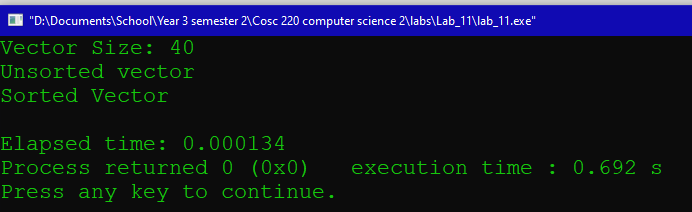


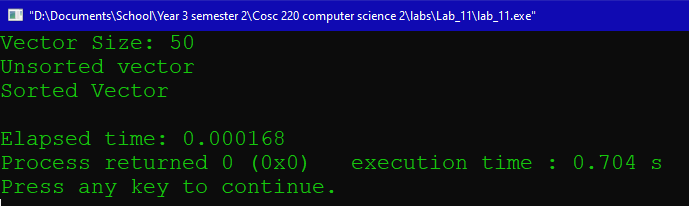
Merge Sort

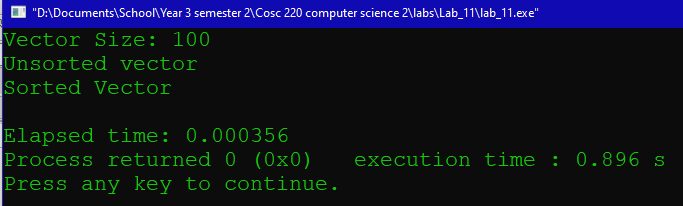


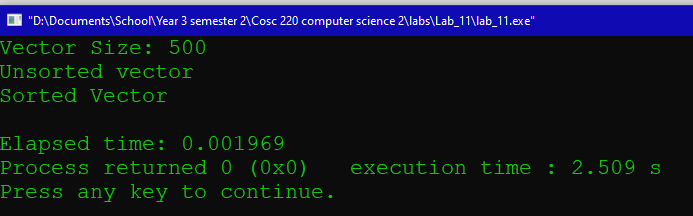


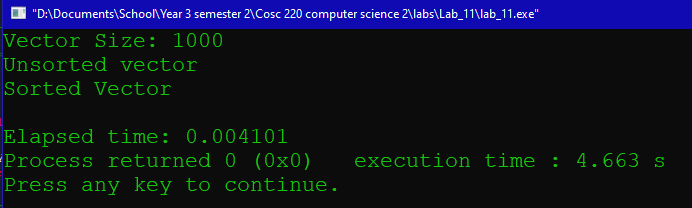




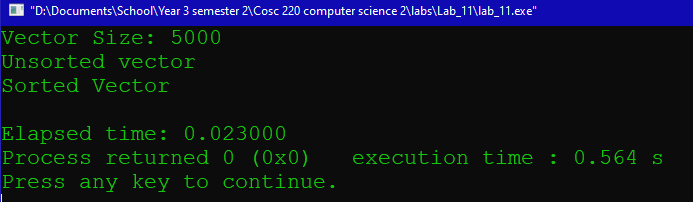


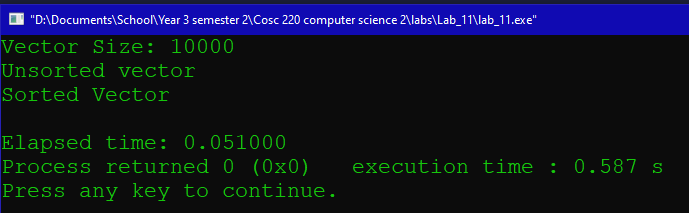


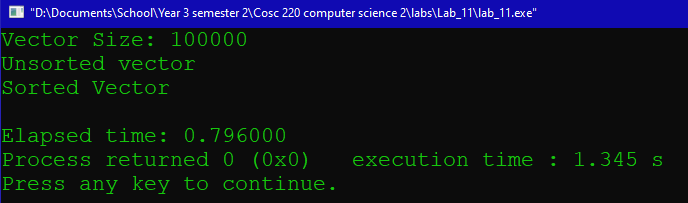


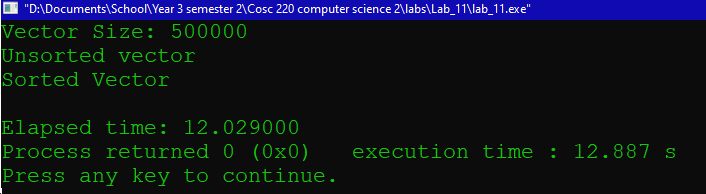


Stopped doing 1000 trials

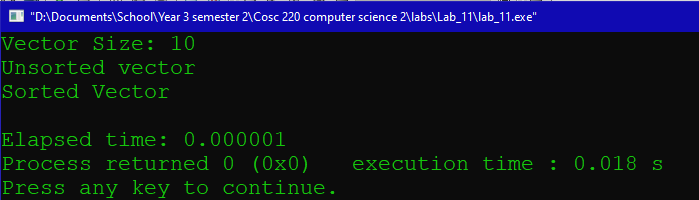


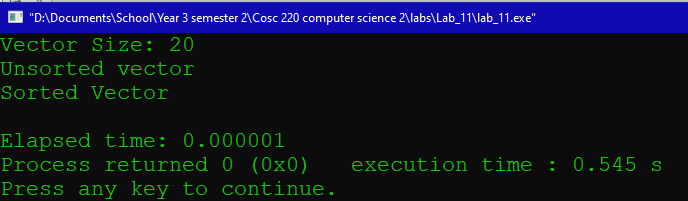


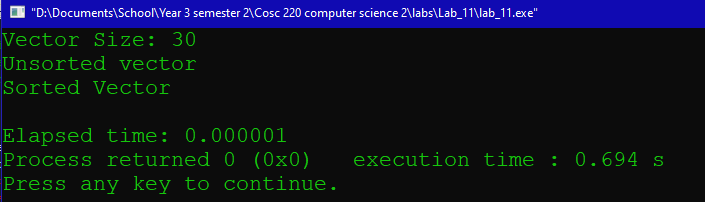


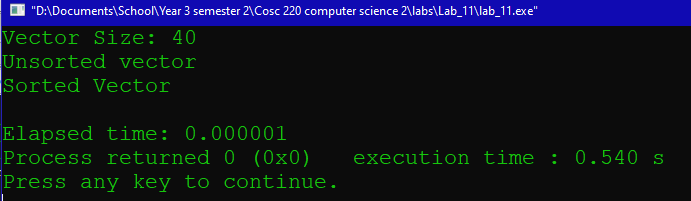


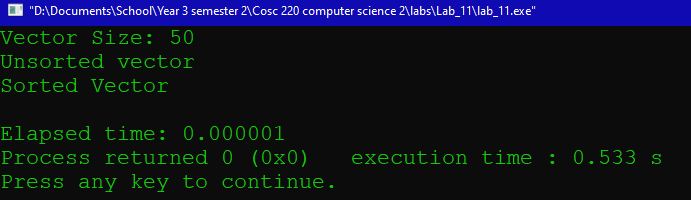
QuickSort

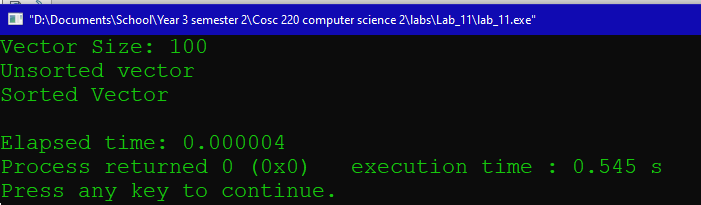


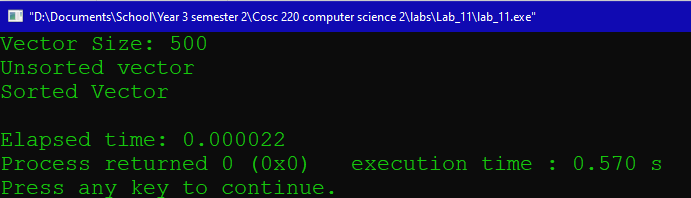


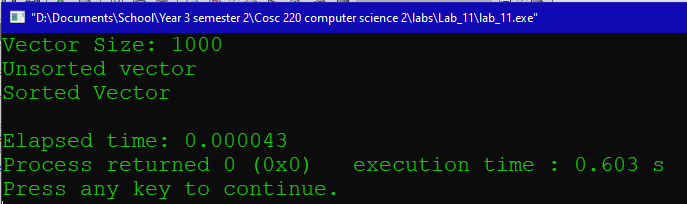


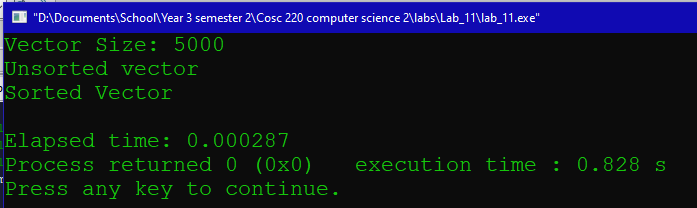


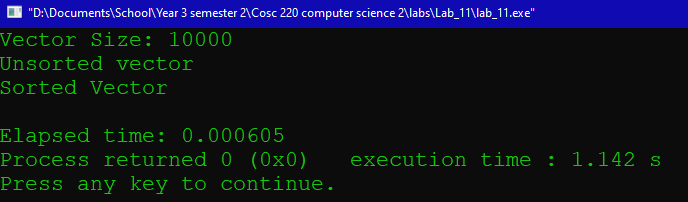


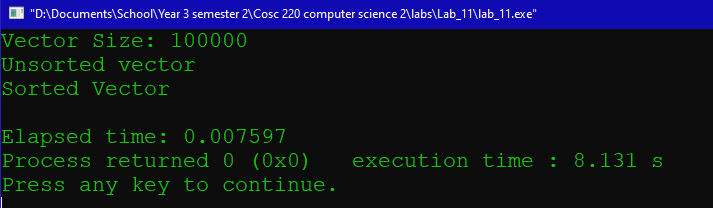




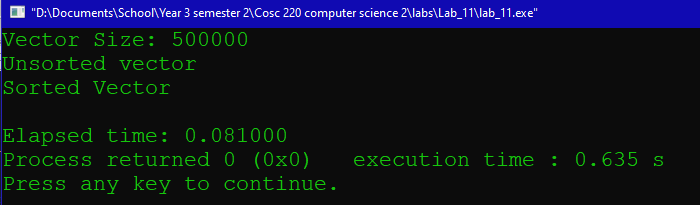






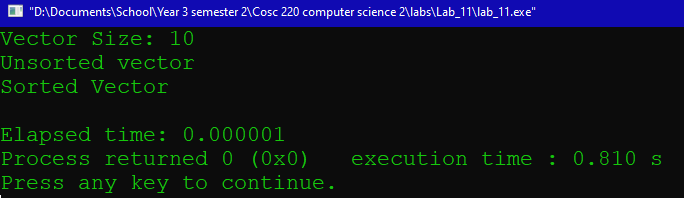


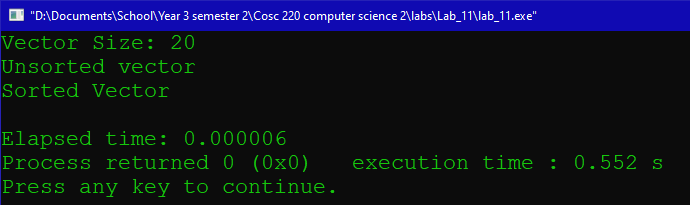
Stopped doing 1000 trials

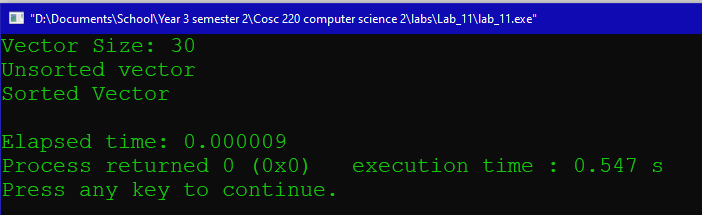


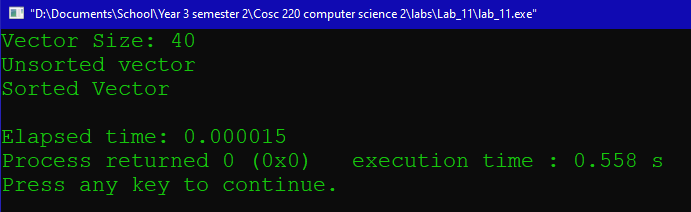
Note:Quick sort is very very fast

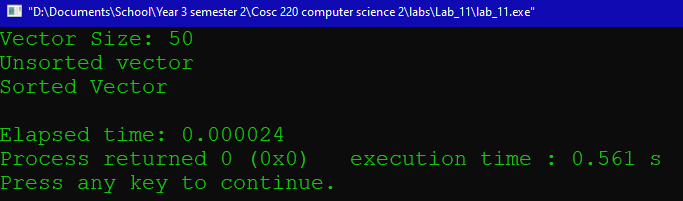
Selection Sort

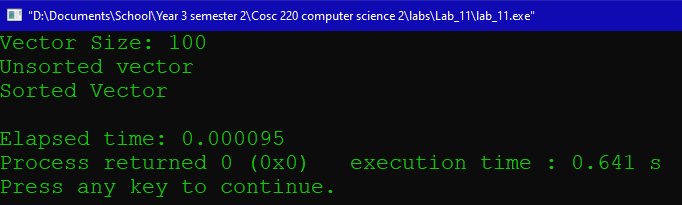


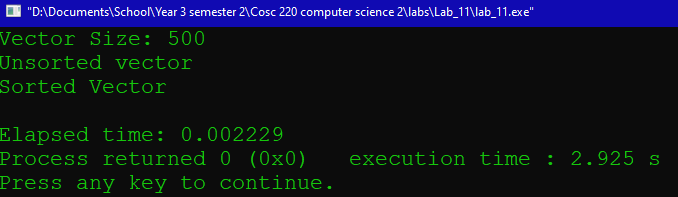


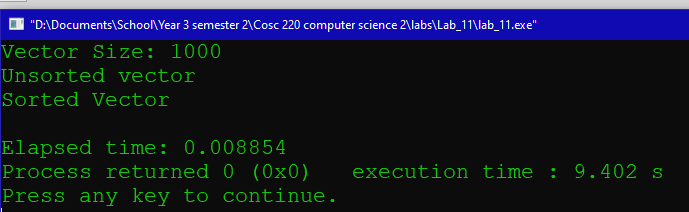




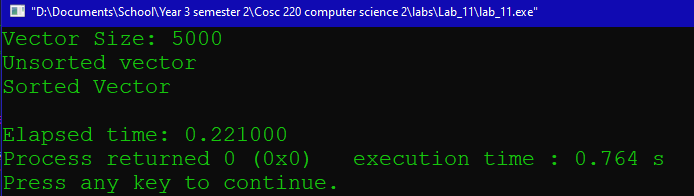


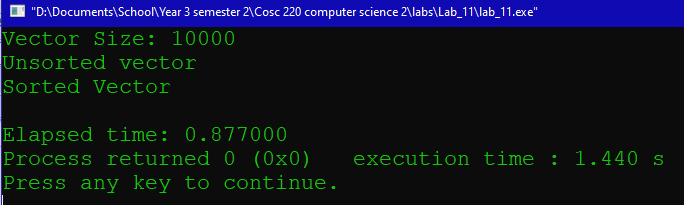


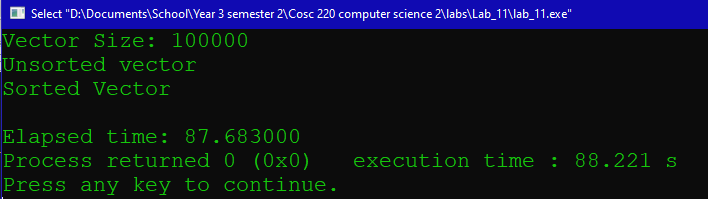


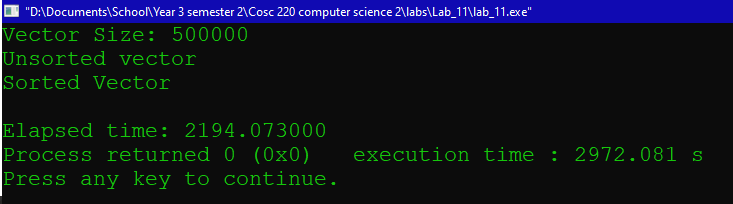


Stopped doing 1000 trials

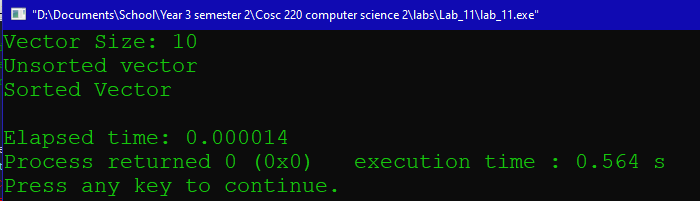


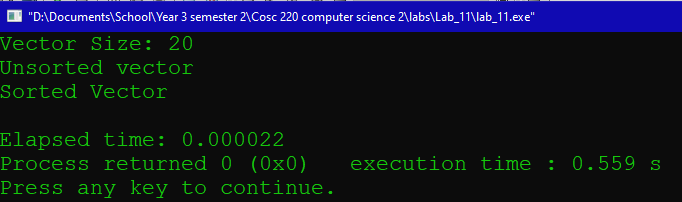


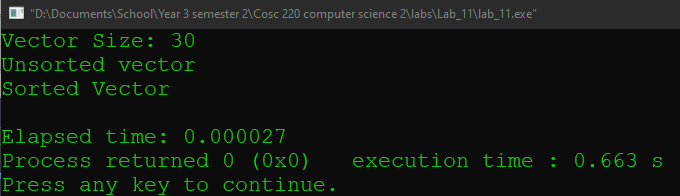


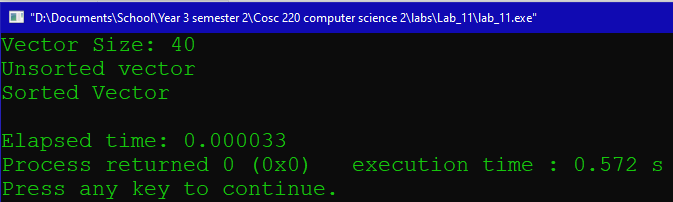


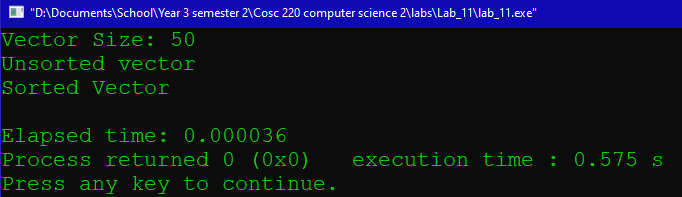
Radix Sort

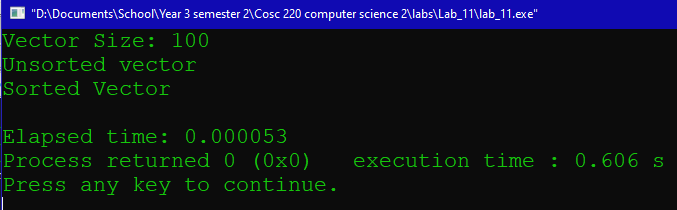


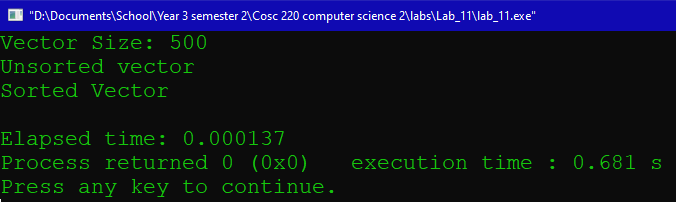


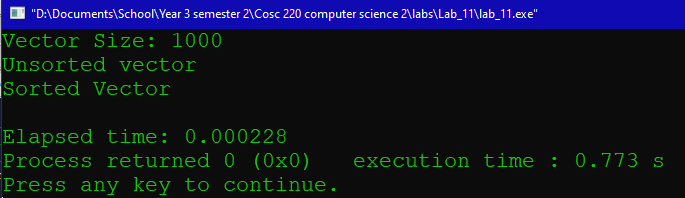


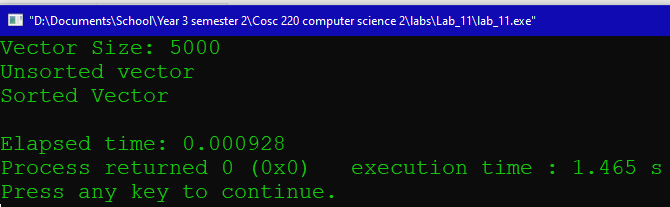




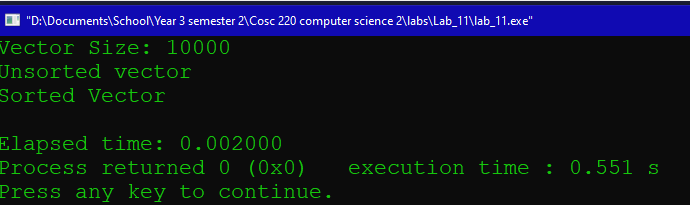


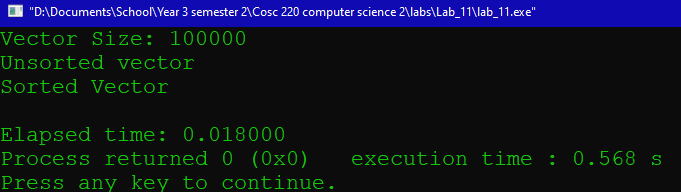


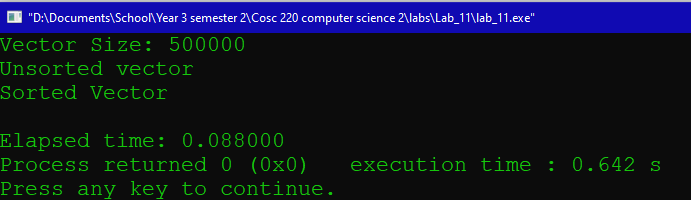




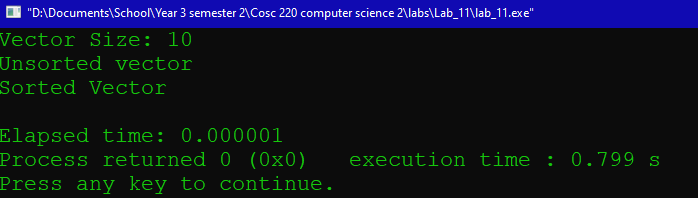
Stopped doing 1000 trials

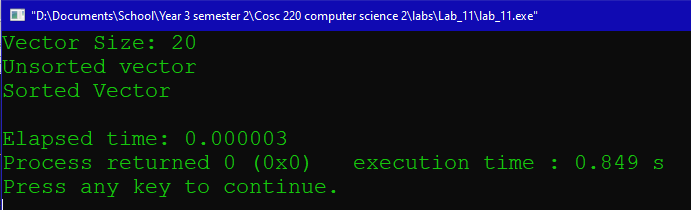


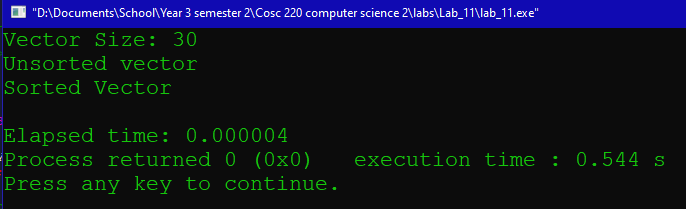


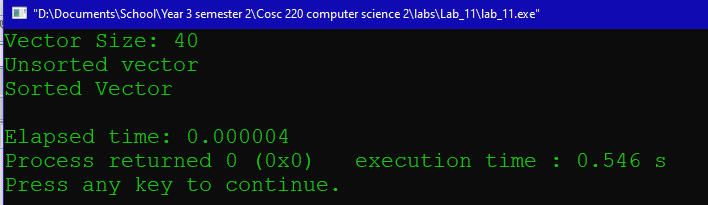


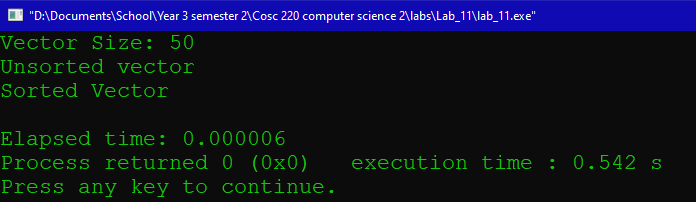
Heap Sort

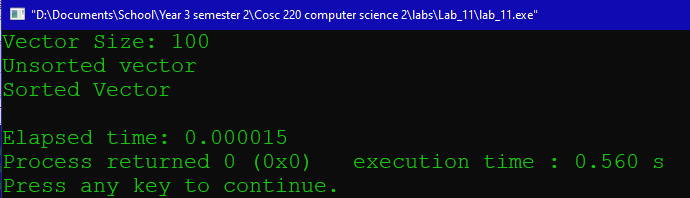


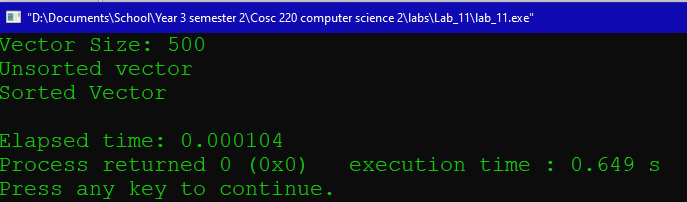


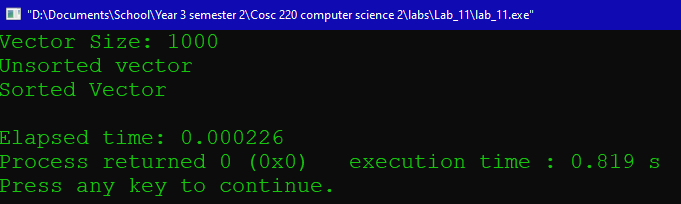


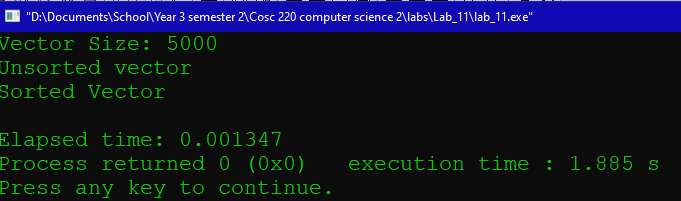




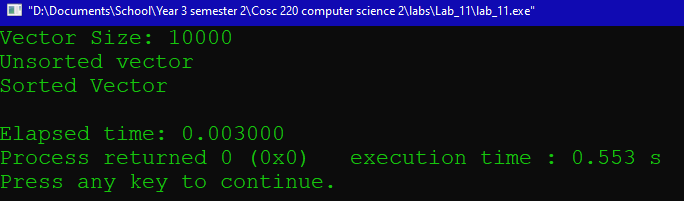


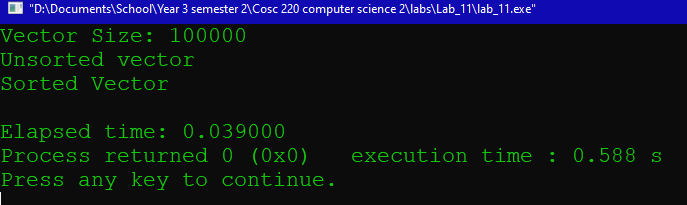






Stopped running 1000 trials





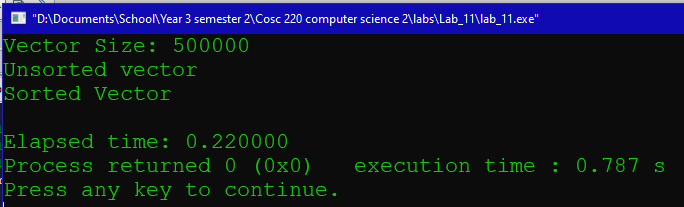
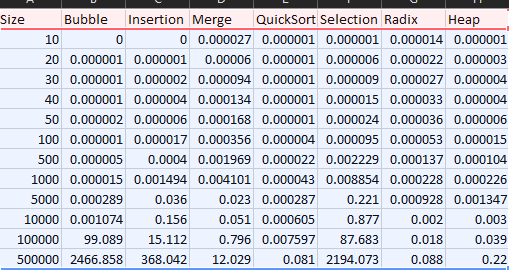


Table of Data measured in seconds (to 6 decimal places)



Vector Size

Time in Seconds