

Kathmandu University

Department of Computer Science & Engineering

Dhulikhel, Kavre



Lab Assignment: 1

Subject Code: Comp 314

Submitted By:

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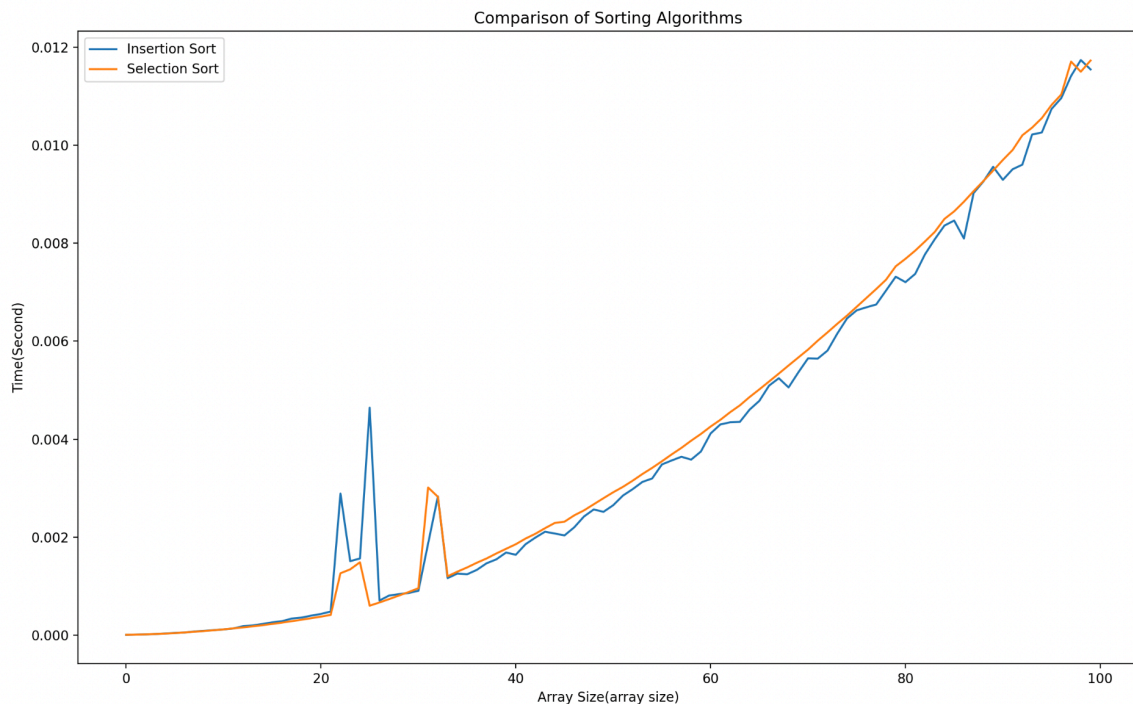
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Task3: Generate some random inputs for your program and apply both insertion sort and merge sort algorithms to sort the generated sequence of data. Record the execution times of both algorithms for inputs of different size. Plot an input-size vs execution-time graph.

Ans: An array with random numbers is generated of size maximum 100. And the graph is plotted using matplotlib. The graph of the time against number of data is plotted below:



Task 4: Explain your observations.

From the graph we can see that when the size of the array is small the insertion sort is taking much more time than the selection sort. But when the size of the array is increased accordingly the time taken by selection sort is slightly more than that of insertion sort.