

# DSA Lab Assignment 3

## Problem Statement:

Create a set of data/text file with count of integers varying in thousands.

- 1) Sort the file using two sorting algorithms.
- 2) Plot the graph of the time taken by both sorting functions/programs using the tool gnuplot.

## Lab File Writing:

Write Short Note on

1. Gnuplot and its various commands
2. Algorithm for sorting algorithms
3. Give the Step Count & Best Case, Worst Case and Average Analysis of used sorting algorithms
4. Printout of graph plotted for time complexity.
5. Compare the graphs and comment of the time complexity predicted and practically observed.

## Conclusion

### Note:

Check the above writeup in next turn.

Ensure the code is well documented and modular.

Upload code file(.c) and its output screenshot in Zip file on Moodle