

BITS Pilani, Pilani Campus
2nd Sem. 2017-18
CS F211 Data Structures & Algorithms

=====

Lab VI - (11th Feb. to 15th Feb.)

=====

Exercise 3 of 3

=====

Topics: QuickSort, Performance Measurements - Running Time and Space Usage, Command Line Arguments

Programming Environment: C on Linux

In all the exercises in this lab sheet, you must construct an array of employee records containing the following fields – *{name and empID}*, where *name* is a string containing a maximum of 10 characters and *empID* is an integer value containing the employee ID. You must use *empID* as the key for all comparisons in your sorting algorithms. Sample input files are given along with this sheet, which can be used in the exercises as input files. Note that all input files have the fields *name* and *empID* separated by space.

Exercise 3: [45 minutes]

Repeat 2. (b) for a few different input files and plot curves (one per input file) of size versus time taken. Do curve fitting to find out the closest defining function per curve and match it with estimated time complexity.