IT LAB - M.TECH CS

LAB 1 (24 July 2017) :

Objective: To analyze the sorting algorithms empirically on sorted (ascending order), random and sorted (descending order) lists to appreciate best case, worst case and average case complexities.

1. Generate files with sizes 100, 1000, 10,000 and 100,000 containing integers in (i) sorted (ascending order), (ii) random and (iii) sorted (descending order).

2. Write clearly the algorithms for A) Bubble sort and B) Selection sort algorithms.

3. Implement these algorithms and output the number of comparisons involved. Run on the files and tabulate the results.

Submit : Please submit Rollno.tar.gz containing the directory named by your rollno having (i) code (ii) a text file containing the results for A and B algorithms on the 12 files.