Data Structures and Algorithms Lab

Lab 05 - Answer Sheet Marks 0:
Roll #:
Name:

Instructions

Tabulate your results in the given tables against the appropriate entry and submit it to the instructor.

A. Data - Random Order

| Input Size | Bubble sort | | | Selection sort | | | Insertion sort | | |
|---------------|-------------|--------------|----------------|----------------|--------------|----------------|----------------|--------------|----------------|
| | Time | Key comp. | Data movements | Time | Key comp. | Data movements | Time | Key comp. | Data movements |
| 500 | | | | | | | | | |
| 6000 | | | | | | | | | |
| 8000 | | | | | | | | | |
| 12000 | | | | | | | | | |
| 14000 | | | | | | | | | |
| 16000 | | | | | | | | | |
| 18000 | | | | | | | | | |
| 20000 | | | | | | | | | |

B. Data - Sorted in Ascending Order

| Input Size | Bubble sort | | | Selection sort | | | Insertion sort | | |
|---------------|-------------|--------------|----------------|----------------|--------------|----------------|----------------|--------------|----------------|
| | Time | Key comp. | Data movements | Time | Key comp. | Data movements | Time | Key comp. | Data movements |
| 500 | | | | | | | | | |
| 6000 | | | | | | | | | |
| 8000 | | | | | | | | | |
| 12000 | | | | | | | | | |
| 14000 | | | | | | | | | |
| 16000 | | | | | | | | | |
| 18000 | | | | | | | | | |
| 20000 | | | | | | | | | |

C. Data – Sorted in Descending Order

| Input Size | Bubble sort | | | Selection sort | | | Insertion sort | | |
|---------------|-------------|--------------|----------------|----------------|--------------|----------------|----------------|--------------|----------------|
| | Time | Key comp. | Data movements | Time | Key comp. | Data movements | Time | Key comp. | Data movements |
| 500 | | | | | | | | | |
| 6000 | | | | | | | | | |
| 8000 | | | | | | | | | |
| 12000 | | | | | | | | | |
| 14000 | | | | | | | | | |
| 16000 | | | | | | | | | |
| 18000 | | | | | | | | | |
| 20000 | | | | | | | | | |