**Sorting II lab**

Please complete all the problems described below

1. Use your notepad to simulate a visualization both for MergeSort and QuickSort algorithms. Consulting the code given on the lecture notes. Use the numbers below as part of your example.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **3** | **4** | **1** | **5** | **0** | **2** | **3** |

1. Write a program that benchmarks *QuickSort* and *InsertionSort*. You should use different data sets and record the performance of each algorithm on the same sets under the same conditions. Write a short report that compares the two algorithms based your results. It is important to include a discussion of the initial states of the data sets in your report.