**CCDSALG Term 2, AY 2022 – 2023**

Project 1 – Comparing Sorting Algorithms

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Section** | **Names** | **Task 1** | **Task 2** | **Task 3** | **Task 4** |
| <Sec> | <LastName1>, <FirstName1> |  |  |  |  |
| <LastName2>, <FirstName2> |  |  |  |  |
| <LastName3>, <FirstName3> |  |  |  |  |

Fill this part with your section and names. For the tasks, put an X mark if you have performed the specified task. Please refer to the project specifications for the tasks.

**LIST OF SORTING ALGORITHMS**

|  |  |  |
| --- | --- | --- |
| **Sorting Algorithm** | **Author (if available)** | **Downloaded From** |
| 1. Bubble sort |  |  |
| 2. Insertion sort |  |  |
| 3. Selection sort |  |  |
| 4. Merge sort |  |  |
| 5. Algorithm 5 |  |  |
| 6. Algorithm 6 |  |  |

**COMPARISON TABLE**

**M = (\_\_)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Size** | **Average Machine Execution Time (milliseconds)** | | | | | |
| **Bubble** | **Insertion** | **Selection** | **Merge** | **Algo5** | **Algo6** |
| 1024 |  |  |  |  |  |  |
| 2048 |  |  |  |  |  |  |
| 4096 |  |  |  |  |  |  |
| : |  |  |  |  |  |  |
| : |  |  |  |  |  |  |
| : |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Size** | **Average Counter Value** | | | | | |
| **Bubble** | **Insertion** | **Selection** | **Merge** | **Algo5** | **Algo6** |
| 1024 |  |  |  |  |  |  |
| 2048 |  |  |  |  |  |  |
| 4096 |  |  |  |  |  |  |
| : |  |  |  |  |  |  |

**GRAPHS**

Copy/paste the line graph here, make sure it is big enough to see the trend in the increase of the average Machine Execution Time (MET) and the average counter value.

**DISCUSSION**

Explain interesting findings based on your experiments.