# Lab Assignment

# QuickSort Results

Graph of the timings of the three quadratic sorts (bubble, selection, insertion) and the recursive mergeSort and quickSort:



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Number of steps required for sorting different sizes of data steps** | | | | | | |
|  | **Type of Sort** | | | | |  |
| Size of dataset | BubbleSort | SelectionSort | InsertionSort | MergeSort | QuickSort |  |
| 100 | **22,882** | **15,933** | **14,236** | **7,818** | **2,866** |  |
| 200 | **89,791** | **62,069** | **62,970** | **17,902** | **6,591** |  |
| 400 | **357,424** | **244,367** | **255,734** | **40,430** | **14,318** |  |
| 800 | **1,431,748** | **957,676** | **990,016** | **90,089** | **33,233** |  |