| Sort Method | Number of Objects | Time (in milliseconds) |
| --- | --- | --- |
| SelectionSort | 10 | 0.034 |
| QuickSort | 10 | 0.0271 |
| LinearSearch | 10 | 0.0336 |
| BinarySearch | 10 | 0.014 |

| Sort Method | Number of Objects | Time (in milliseconds) |
| --- | --- | --- |
| SelectionSort | 100 | 0.5493 |
| QuickSort | 100 | 0.0779 |
| LinearSearch | 100 | 0.0145 |
| BinarySearch | 100 | 0.0064 |

| Sort Method | Number of Objects | Time (in milliseconds) |
| --- | --- | --- |
| SelectionSort | 1.000 | 7.6618 |
| QuickSort | 1,000 | 1.1573 |
| LinearSearch | 1,000 | 0.0309 |
| BinarySearch | 1,000 | 0.0093 |

| Sort Method | Number of Objects | Time (in milliseconds) |
| --- | --- | --- |
| SelectionSort | 10,000 | 80.4083 |
| QuickSort | 10,000 | 6.0803 |
| LinearSearch | 10,000 | 0.8586 |
| BinarySearch | 10,000 | 0.0096 |

| Sort Method | Number of Objects | Time (in milliseconds) |
| --- | --- | --- |
| SelectionSort | 100,000 | 10994.2594 |
| QuickSort | 100,000 | 33.9123 |
| LinearSearch | 100,000 | 1.0086 |
| BinarySearch | 100,000 | 0.0506 |

Based on the data in the tables, I would say the algorithm analysis discussion we were having in class does apply because as the number of objects in the array increases, the longer it takes the selection sort to sort the objects and it is significantly longer than the quick sort. At first, the amount of time isn’t that much longer, but as the number of objects increases, it becomes increasingly longer than the quick sort.