***CSC 321 Program 6 300 Points***

Develop a program to implement and compare the performance of the following sort algorithms.

1. ***Insertion Sort***
2. ***Quick Sort***
3. ***Merge Sort***
4. ***Radix Sort***
5. ***Java sort***
6. ***Java parallel sort***

Use the dataset provided

|  |  |
| --- | --- |
| Algorithm | Report |
| ***Insertion Sort*** | Number of comparisons, data movements and Elapsed time |
| ***Quick Sort*** | Number of comparisons, data movements and Elapsed time |
| ***Merge Sort*** | Number of comparisons, data movements and Elapsed time |
| ***Radix Sort*** | Use decimal (10), binary (2), hexadecimal (16) and 256 radix and report the number of data movements and Elapsed time |
| ***Java Sort*** | Elapsed time |
| ***Java Parallel Sort*** | Elapsed time |

* **Keep the original array intact, copy to another array and continue with sort.**

Table

Description automatically generated

***Submit:***

* Runnable Jar and Java files zipped (.zip) into a single file with your name as its title through BB.
* Also email me that java files zipped as above through [seyedt1@southernct.edu](mailto:seyedt1@southernct.edu) as an attachment to an email with a title that reads as “CSC 321 – Program 6 – your last name”