

Blockchain Assignment

Issues faced while coding are:

There are 2 rows with no values in Transactions file. Without deleting those two rows, we will encounter "ArrayIndexOutOfBoundsException"

The same happens with the missing values in the columns.

The execution time depends on the System RAM and available memory.

The execution time on my machine for the programs are:

1. I used MergeSort – 48 milliseconds
2. I used Mergesort – 112 milliseconds
3. I used Mergesort – 856 milliseconds
4. I used Timsort – 32 milliseconds
5. I used Timsort – 12 milliseconds
6. I used Binary search – 10 milliseconds (depends on the searching block number)
7. I used Binary search – 8 milliseconds (depends on the transaction code and number of transactions associated with it)
8. Depends on the taken public-key node value. I got 6 milliseconds
9. Depends on the taken public-key node value. I got 4 milliseconds
10. Depends on the taken contract ID value. I got 3 milliseconds
11. Time to build graph is 170 milliseconds. Depends on the starting node. BFS – 1, DFS – 0.