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CSE 3353

Report For Lab 01

Data table for data size of 10 ints

|  |  |  |  |
| --- | --- | --- | --- |
|  | Bubble | Insertion | Merge |
| Random | 4 | 1 | 13 |
| Reversed | 1 | 1 | 12 |
| Unique | 1 | 1 | 198 |
| Partial sort | 1 | 1 | 16 |

Data table for data size of 1,000 ints

|  |  |  |  |
| --- | --- | --- | --- |
| 1000 | Bubble | Insertion | Merge |
| Random | 6591 | 2416 | 1202 |
| Reversed | 7027 | 5140 | 1034 |
| Unique | 5827 | 5023 | 1896 |
| Partial sort | 3262 | 1303 | 3607 |

Data table for data size of 10,000 ints

|  |  |  |  |
| --- | --- | --- | --- |
| 10000 | Bubble | Insertion | Merge |
| Random | 695939 | 254709 | 14506 |
| Reversed | 766972 | 514836 | 13134 |
| Unique | 548680 | 411019 | 17516 |
| Partial sort | 469523 | 129413 | 36904 |

Data table for data size of 100,000

|  |  |  |  |
| --- | --- | --- | --- |
| 100000 | Bubble | Insertion | Merge |
| Random | 69098069 | 25489516 | 155933 |
| Reversed | 69137534 | 52724539 | 138397 |
| Unique | 60291488 | 25092953 | 179958 |
| Partial sort | 53527503 | 10259318 | 195607 |

Chart relationships between time and data sets for each sort type.

Random Sort:

Reversed Sort:

20% Unique Values:

Partially Sorted: