Contoh intput dan output

Data input dan output yang dipergunakan pada contoh hanya berjumlah 100 agar mempermudah untuk dibaca

**Algoritma: Merge Sort**

Tabel awal:

95, 89, 85, 8, 46, 5, 20, 27, 17, 25, 31, 64, 97, 88, 42, 90, 65, 86, 4, 44, 55, 75, 48, 11, 27, 55, 50, 6, 5, 18, 82, 52, 58, 18, 11, 3, 23, 82, 82, 39, 7, 12, 2, 55, 99, 43, 44, 63, 80, 47, 59, 86, 21, 58, 48, 100, 12, 49, 57, 69, 18, 91, 20, 75, 8, 82, 30, 30, 63, 11, 20, 69, 22, 73, 24, 72, 67, 19, 86, 98, 18, 96, 35, 38, 54, 82, 89, 17, 83, 98, 85, 100, 88, 4, 75, 47, 85, 4, 77, 100,

Tabel hasil pengurutan:

2, 3, 4, 4, 4, 5, 5, 6, 7, 8, 8, 11, 11, 11, 12, 12, 17, 17, 18, 18, 18, 18, 19, 20, 20, 20, 21, 22, 23, 24, 25, 27, 27, 30, 30, 31, 35, 38, 39, 42, 43, 44, 44, 46, 47, 47, 48, 48, 49, 50, 52, 54, 55, 55, 55, 57, 58, 58, 59, 63, 63, 64, 65, 67, 69, 69, 72, 73, 75, 75, 75, 77, 80, 82, 82, 82, 82, 82, 83, 85, 85, 85, 86, 86, 86, 88, 88, 89, 89, 90, 91, 95, 96, 97, 98, 98, 99, 100, 100, 100,

Waktu eksekusi: 0.047 ms.

**Algoritma: Quick Sort**

Tabel awal:

224, 726, 556, 721, 737, 387, 157, 553, 498, 311, 493, 996, 7, 406, 925, 505, 541, 54, 303, 289, 257, 625, 421, 285, 285, 668, 385, 481, 769, 788, 247, 344, 514, 155, 65, 602, 541, 221, 154, 39, 884, 998, 34, 890, 404, 310, 746, 296, 716, 48, 937, 324, 672, 357, 608, 308, 376, 345, 789, 497, 484, 387, 840, 349, 541, 256, 950, 82, 829, 104, 472, 712, 453, 505, 601, 208, 166, 698, 504, 233, 97, 440, 556, 769, 148, 164, 428, 524, 860, 568, 20, 343, 307, 211, 692, 847, 467, 641, 280, 647,

Tabel hasil pengurutan:

7, 20, 34, 39, 48, 54, 65, 82, 97, 104, 148, 154, 155, 157, 164, 166, 208, 211, 221, 224, 233, 247, 256, 257, 280, 285, 285, 289, 296, 303, 307, 308, 310, 311, 324, 343, 344, 345, 349, 357, 376, 385, 387, 387, 404, 406, 421, 428, 440, 453, 467, 472, 481, 484, 493, 497, 498, 504, 505, 505, 514, 524, 541, 541, 541, 553, 556, 556, 568, 601, 602, 608, 625, 641, 647, 668, 672, 692, 698, 712, 716, 721, 726, 737, 746, 769, 769, 788, 789, 829, 840, 847, 860, 884, 890, 925, 937, 950, 996, 998,

Waktu eksekusi: 0.045 ms.

**Algoritma: Selection Sort**

**Algoritma: Insertion Sort**

Perbangingan Waktu Eksekusi

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Banyak data | MergeSort | QuickSort | Selection Sort | Insertion Sort |
| 1 | 1.000 | 0,504 | 0,404 |  |  |
| 2 | 5.000 | 2,997 | 1,735 |  |  |
| 3 | 10.000 | 6,104 | 4,311 |  |  |
| 4 | 50.000 | 17,785 | 12,610 |  |  |
| 5 | 100.000 | 29,562 | 19,644 |  |  |
| 6 | 500.000 | 162,453 | 122,412 |  |  |
| 7 | 1.000.000 | 340,688 | 236,665 |  |  |