Oscillating merge sort

Oscillating merge sort or **oscillating sort** is a variation of merge sort used with tape drives that can read backwards. Instead of doing a complete distribution as is done in a tape merge, the distribution of the input and the merging of runs are interspersed. The oscillating merge sort does not waste rewind time or have tape drives sit idle as in the conventional tape merge.

The oscillating merge sort "was designed for tapes that can be read backward and is more efficient generally than either the polyphase or cascade merges."[1]

References

1. Bradley 1982, p. 190

- Bradley, James (1982), *File and Data Base Techniques* (https://archive.org/details/filedatabasetech0000brad), Holt, Rinehart and Winston, ISBN 0-03-058673-9

Further reading

- Flores, Ivan (1969), *Computer Sorting*, Prentice-Hall, ISBN 978-0-13165746-5
- Knuth, D. E. (1975), *Sorting and Searching*, The Art of Computer Programming, **3**, Addison Wesley
- Lowden, B. G. T., "A note on the oscillating sort" (http://comjnl.oxfordjournals.org/content/20/1/92.full.pdf) (PDF), *The Computer Journal*, **20** (1): 92, doi:10.1093/comjnl/20.1.92 (https://doi.org/10.1093%2Fcomjnl%2F20.1.92)
- Martin, W. A. (1971), "Sorting", *Computing Surveys*, ACM
- Sobel, Sheldon (July 1962), "Oscillating Sort–A New Sort Merging Technique", *Journal of the ACM*, New York, NY: ACM, **9** (3): 372–374, doi:10.1145/321127.321133 (https://doi.org/10.1145%2F321127.321133)

External links

- Mihaldinecz, Maximilian (2016), "A variation of Oscillating Merge Sort implemented in Matlab (https://github.com/MaximilianMihaldinecz/oscillating-merge-sort)", GitHub