

Theory and Code Task 4

Russell Cannon, Ian Mooney, Patrick Murphy

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Abstract

citations

1 Key Reports

1. The occupancy ratio to be used in linear probing. This involves experimenting with different values such as 50%, 70%, and 80%, and reporting runtimes in nanoseconds.
2. Optimizing chain length in open hashing. At least three experiments should be conducted, and runtimes in nanoseconds should be reported.
3. Experimentation with different hash functions. A simple function such as $f(r) = r \% \text{hsize}$ should be the initial attempt.
4. Handling collisions in the table for linear probing. The collision resolution method implemented must be described, with research and inclusion of a method described in the lecture.
5. The necessity of an interface file (a “.h” file) for the functions implemented.
6. Writing a function to prompt a user for a word, display the number of occurrences of this word in the text, and the locations of said occurrences in “The Adventure of the Engineer’s Thumb”.
7. Implementing a function to output a list of the 80 least frequently occurring words in the text.
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