CE205 Data Structures Week-7

Linear, Binary and Fibonacci Search, Hashing and Hash Tables with Perpect Hashing

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2.0.2   Outline-1

- Linear Search
- Binary Search
- Binary Search vs Linear Search
- Interpolation Search
- Interpolation search vs Binary search
- Fibonacci Search

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[1] ce205-week-7-search-hashing.md_doc.pdf
[2] ce205-week-7-search-hashing.md_slide.pdf
[3] ce205-week-7-search-hashing.md_slide.pptx

2.0.3 Outline-2

- Hashing and Hash Tables
- Direct-Address Tables
    - Hash Tables
    - Hash Functions
    - Open Adressing
    - Perfect Hashing

2.0.4 Linear Search

- http://www.btechsmartclass.com/data_structures/linear-search.html
- https://www.geeksforgeeks.org/linear-search/

2.0.5 Binary Search

- http://www.btechsmartclass.com/data_structures/binary-search.html
- https://www.geeksforgeeks.org/binary-search/
- https://visualgo.net/en/bst

2.0.6 Binary Search vs Linear Search

- https://www.geeksforgeeks.org/linear-search-vs-binary-search/?ref=rp

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2.0.7 Interpolation Search

- https://www.geeksforgeeks.org/interpolation-search/

2.0.8 Interpolation search vs Binary search

- https://www.geeksforgeeks.org/g-fact-84/?ref=rp

2.0.9 Fibonacci Search

- https://www.geeksforgeeks.org/fibonacci-search/

2.0.10 Hashing and Hash Tables

- https://www.hackerearth.com/practice/data-structures/hash-tables/basics-of-hash-tables/tutorial/
- http://www.btechsmartclass.com/data_structures/hashing.html

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2.0.10.1 Direct-Address Tables

- https://www.geeksforgeeks.org/direct-address-table/

2.0.10.2 Hash Tables

- https://www.tutorialspoint.com/data_structures_algorithms/hash_data_structure.htm

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2.0.10.3 Hash Functions

- https://www.geeksforgeeks.org/what-are-hash-functions-and-how-to-choose-a-good-hash-function/
- https://www.tutorialspoint.com/cryptography/cryptography_hash_functions.htm
- https://www.cs.hmc.edu/~geoff/classes/hmc.cs070.200101/homework10/hashfuncs.html

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2.0.10.4 Open Adressing

- https://www.geeksforgeeks.org/hashing-set-3-open-addressing/

2.0.10.5 Perfect Hashing

- https://en.wikipedia.org/wiki/Perfect_hash_function#:~:text=In%20computer%20science%2C%20a%20perfect,const

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$$End - Of - Week - 6$$