## RadixSort. Arbori binari de căutare

## Bibliografie

- <a href="https://web.stanford.edu/class/archive/cs/cs161/cs161.1168/lecture8.pdf">https://web.stanford.edu/class/archive/cs/cs161/cs161.1168/lecture8.pdf</a> (similar Cormen)
- https://www.geeksforgeeks.org/binary-search-tree-data-structure/?ref=lbp
- <a href="https://algs4.cs.princeton.edu/32bst/">https://algs4.cs.princeton.edu/32bst/</a> si cartea Algorithms,
  <a href="https://algs4.cs.princeton.edu/lectures/keynote/32BinarySearchTrees.pdf">https://algs4.cs.princeton.edu/lectures/keynote/32BinarySearchTrees.pdf</a>

## Probleme

- 1. **Radix Sort** https://www.pbinfo.ro/probleme/2700/radixsort
- 2. Implementați operațiile de bază pentru un arbore binar de căutare recursiv/nerecursiv
  - Inserarea unei valori date

https://leetcode.com/problems/insert-into-a-binary-search-tree/https://www.techiedelight.com/?problem=InsertKeyIntoBST

• Parcurgerea în inordine

https://www.pbinfo.ro/probleme/3010/bst

Căutarea unei valori date

https://www.techiedelight.com/?problem=SearchKeyInBST

- Determinarea valorii minime și maxime din arbore
- Determinarea celei mai apropiate valori mai mare/mai mică decât o valoare dată (succesor / predecesor în inordine)

https://www.techiedelight.com/?problem=InorderPredecessorBST https://www.techiedelight.com/?problem=InorderSuccessorBST

- Ştergerea valorii minime
- Ştergerea unei valori date

https://leetcode.com/problems/delete-node-in-a-bst/ https://www.techiedelight.com/?problem=DeleteKeyFromBST

- 3. <a href="https://leetcode.com/problems/binary-tree-preorder-traversal/">https://leetcode.com/problems/binary-tree-preorder-traversal/</a> și nerecursiv folosind stiva
- 4. <a href="https://leetcode.com/problems/range-sum-of-bst/description/">https://leetcode.com/problems/range-sum-of-bst/description/</a>
- 5. https://leetcode.com/problems/maximum-depth-of-binary-tree/
- 6. https://leetcode.com/problems/balanced-binary-tree/
- 7. <u>leetcode.com/problems/lowest-common-ancestor-of-a-binary-search-tree/</u>
- 8. <a href="https://www.techiedelight.com/?problem=LowestCommonAncestorII">https://www.techiedelight.com/?problem=LowestCommonAncestorII</a> (similar cu 6, dar aici nodurile pot sa nu fie în arbore)