

## **Data Structures**

1. Hash table
  - a. Hashing algorithms
    - i. Division method
    - ii. Multiplication method
    - iii. Folding method
    - iv. Mid-square method
  - b. Collision resolution techniques
    - i. Linear probing
    - ii. Quadratic probing
    - iii. Double hashing
    - iv. Chaining
  - c. Rehashing
2. Binomial heap
3. Fibonacci heap
4. B tree
5. B+ tree
6. Red black tree
7. Splay tree
  - a. Splay tree
  - b. Bottom-up deletion
  - c. Top-down deletion
8. Digital search tree
9. Binary trie
  - a. Binary trie
  - b. Compressed binary trie
  - c. Patricia
10. Prefix tree
11. Suffix tree