

1. Compare link list and array data structures and give at least ten differences on various aspects.
2. Write a complete algorithm for integer multiplication using divide and conquer strategy.
3. Write an algorithm for deletion in a binary search tree. Use C/C++ syntax.
4. Explain and Differentiate
  - (a) Apriori analysis and posterior analysis
  - (b) Loop jamming and loop unrolling
  - (c) Chain hashing and open addressing
  - (d) Selection sort and radix sort
  - (e) Big-oh notation and big-omega notation
  - (f) Micro analysis and macro analysis