Object Oriented Programming

- Pillars of OOP
- Types of Inheritance
- What is Diamond Problem
- Compile Time & Runtime Polymorphism
- Constructor & Destructor
- Access Modifiers
- Static Keyword in Class, Method & Field
- > Final Keyword in Class, Method & Field
- Composition , Aggregation & Association
- Multithreading
- Singleton Pattern & Factory Pattern
- SOLID Principles
- Coupling & Cohesion
- Abstraction vs Encapsulation
- Abstract Class vs Interface Class
- Overriding & Overloading
- Static & Dynamic Binding





Data Structure and Algorithms

- Implement Stack using Queue
- Implement Queue using Stack
- Middle of a Linked List
- > Find Linked List is circular or not
- > Insert/Delete at nth node of Linked List
- Merge two Linked Lists
- > Reverse a Linked List
- Binary Search Tree
- Sorting Algorithms
- Complexities & Stability of Sorting Algorithms
- Difference between List, Array & Vector
- Expression Evaluation
- BFS & DFS
- Check if a Graph is a Tree or not
- Hashmap
- Infix, Prefix and Postfix notations
- Heap





Database

- DDL, DML, DQL,DCL
- Indexing & its methods
- > Find the Employees who hired in the Last n months
- Deadlock and methods to remove it
- Anomalies in Database
- Normalization
- Joins and its Types
- Difference between Truncate and Drop
- Composite Key, Primary Key, Foreign Key
- Relationships
- Transaction, Commit & Rollback
- Views & Triggers
- ACID Properties
- SQL Queries
- Stored Procedures
- Subqueries





Coding Interviews

- Move all zeros of an array in the end with maintaining the order
- Find the middle of a LinkedList
- Reverse a LinkedList
- > Find the kth largest element in binary tree
- Check if a string is a palindrome or not
- Find factorial of a number(Recursive and Iterative Method)
- Find all anagrams in a string
- Check if a binary tree is a BST
- > Implement Stack using Queue
- Implement Queue using Stack
- Level Order traversal of a binary tree
- Program to print a Fibonacci series
- Count pairs with a given sum





Additional Questions

- SDLC Models
- SDLC Phases
- Scrum Framework
- Whitebox, Greybox and Blackbox Testing
- Scheduling Algorithms
- MVC Framework
- Unit testing & Integration Testing
- HTTP session
- TCP/IP model vs OSI model
- SOAP vs Restful API
- Check if a string is a palindrome or not
- POST & GET Request
- Cookies
- > Program to print a Fibonacci series
- Program to print a Factorial of a number



