

# TECHNICAL INTERVIEW CHECKLIST

## 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



# TECHNICAL INTERVIEW CHECKLIST

## 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



# TECHNICAL INTERVIEW CHECKLIST

## 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



# TECHNICAL INTERVIEW CHECKLIST

## 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



# TECHNICAL INTERVIEW CHECKLIST

## 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

