Technical Interview Questions

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Object Oriented Programming

* 🔵 Pillars of OOP
* 🔵 Types of Inheritance
* 🔵 What is Diamond Problem
* 🔵 Compile Time & Runtime Polymorphism
* 🔵 Constructor & Destructor
* 🔵 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
* 🔵 What is “this” pointer? What does it represent?
* 🔵 Use of Super keyword
* 🔵 Difference between a Structure and a Class
* 🔵 Difference between Immutable and Mutable strings
* 🔵 Up-casting and down-casting
* 🔵 Differentiate between shallow and deep copy

#### **Data Structure and Algorithms**

* 🔵 Implement Stack using Queue
* 🔵 Write a program to implement a stack with push and pop functionality
* 🔵 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

#### **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
* 🔵 Paging
* 🔵 Difference between BETWEEN and IN operators in SQL
* 🔵 Select all names that start with a given letter
* 🔵 Name the student who has secured the third highest marks using subqueries

#### **Coding Questions**

* 🔵 Let's say that you have an integer array with random numbers. Now write a program to shift all the larger numbers to the left of the array
* 🔵 Write a program to find factorial of a number using a recursive and iterative method
* 🔵 Write a program to find the second-highest number in an array
* 🔵 Move all zeros of an array in the end with maintaining the order
* 🔵 Print only the missing values from the sorted array
* 🔵 Program to print a Fibonacci series
* 🔵 Check if a string is a palindrome or not

#### **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
* 🔵 What are orphan threads? How are they created?
* 🔵 POST & GET Request
* 🔵 Cookies
* 🔵