Technical Interview Questions



01/05/2022

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 Models □ SDLC Phases □ Scrum Framework □ Whitebox, Greybox and Blackbox Testing
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