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Curriculum Of Code Cracker

COMPETITIVE PROGRAMMING

- An Introduction to Competitive Programming
- Important Subjects for Competitive Programming
- Online Platforms for Competitive Programming
- A brief comparison of hackerearth, hackerrank, codechef and related platforms
- Being a student, which Platform to start with and why?
- How to increase levels/points on different platforms

IT COMPANIES CODING ROUNDS

- Coding Rounds in IT companies
- Particulars about companies like TCS, Wipro and Cognizant
- Start preparing for coding rounds of selected IT companies

SAMPLE TEST PREPARATION

- Discussion about sample test of TCS (Not solving all questions)
- Discussing the levels of questions
- Solutions to basic questions asked in sample test
- Assignment: Simple Problems asked in IT companies: For a self-evaluation of students.

ADVANCE C LANG CONCEPTS IMPORTANT FOR CODING ROUNDS

- Scope of the Functions
- Important Inbuilt Libraries
- Advance Pointers Concept
- Call by value/reference
- Iteration and Recursion
- Arrays Traversal
- Searching and Sorting
- Strings and 2-d Arrays

PRACTISE PROBLEMS

- C Lang Questions asked in IT Companies like TCS, Wipro and more
- Solutions to the Problems
- Practise Test

OOPS CONCEPTS IMPORTANT FOR CODING ROUNDS

- Encapsulation and Abstraction
- Virtual and Pure Virtual
- Constructor and Destructor



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- Inheritance & Polymorphism
- Message Passing
- Dynamic Allocation

JAVA CONCEPTS IMPORTANT FOR CODING ROUND

- Platform Independency and JVM Architecture
- Java OOPS Concepts
- Array, string and collections
- Exception Handling
- Generics
- JDBC
- Lambda Expression and Functional Interface
- Advance Concepts

PRACTISE PROBLEMS

- OOPS and Java Questions asked in IT Companies like TCS, Wipro and more
- Solutions to the Problems
- Practise Test

COMPLEXITIES

- Time Complexity
- Space Complexity
- Time and Space Efficiency
- To create time and space efficient programs

DATA STRUCTURE

- Stacks
- Queues
- Linked Lists (Singly, Doubly, Circular)
- Trees
- Binary Search Trees
- Graphs (only basics)
- Sorting
- Hashing

ADVANCED-DATA STRUCTURE

- AVL Trees
- B Trees



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- Standard Template Libraries (STL)
- Algorithms
- Sorting
- Searching
- Important STL Algorithms & Useful Array algorithms
- Partition Operations
- Containers, Sequence Containers & Associative Containers
- Container Adaptors
- Functions
- Iterators

PRACTISE PROBLEMS

- Data Structure Questions asked in IT Companies like TCS, Wipro and more
- Solutions to the Problems
- Practise Test

OBJECT MODELLING

- Class Model, State Model
- Interaction Model

COMPILER DESIGN CONCEPTS

SOLVING TEST PAPERS ASKED IN IT COMPANIES LIKE TCS, WIPRO AND COGNIZANT

REGULAR PRACTICE SESSIONS

REGULAR PRACTICE TESTS

MOCK SESSIONS

SOLVING TEST PAPERS OF OTHER IT COMPANIES

HARD CORE PRACTICE SESSIONS AT THE TIME OF PLACEMENTS













