

Competitive Programming Tutorials

Mini Courses

Mini Courses are to give you a quick overview on the topic along with practicing problems by the top CodeChef Educators. Whether you are starting out or want to have a quick revision, these 3 sessions courses will help you learn the topics quickly.

Topic	Courses by Educator	
Aho-Corasick-Algorithm	Riya Bansal	
Backtracking	Sanket Singh	
Binary Search	<u>Deepak Gour</u>	
Binary Trees	Riya Bansal	
Building Blocks of Programming	Arnab Chakraborty	
Combinatorics	Himanshu Singh	
Disjoint Set Union	Triveni Mahatha	
Dynamic Programming Through Problem Solving	Arjun Arul, Himanshu Singh, Sidhant Bansal	
Dynamic Programming - Sum over subset	Vivek Chauhan	
FAANG Interview Problems		
Fast Exponentiation and Recurrence Relations	<u>Sanket Singh</u> <u>Triveni Mahatha</u>	
Fenwick and Segment Trees		
	Surya Kiran Nishchay Manwani	
FFT in Polynomial operations and Advanced Combinatorics	Nishchay Manwani	
Game Theory	<u>Surya Kiran</u>	
Graph Algorithms	<u>Triveni Mahatha</u> , <u>Himanshu Singh</u>	
Graph Interview Problems	<u>Sanket Singh</u>	
Graph Theory (in Hindi)	<u>Utkarsh Gupta</u>	
Graphs and its properties	<u>Surya Kiran</u>	
Graphs using Problem Solving	<u>Riya Bansal</u>	
Greedy Algorithms	<u>Srikkanth</u>	
Hashing	<u>Riya Bansal</u>	
Heaps	Rohit Mazumder	
Internship Interview Problems	<u>Sanket Singh</u>	
Interview Problem Solving on Sets and Hash Maps	<u>Riya Bansal</u>	
Linked List Problems	<u>Riya Bansal</u>	
Meet In The Middle Algorithm	<u>Vivek Chauhan</u>	
Mysterious Topic Problems	<u>Pulkit Chhabra</u>	
Number Theory	<u>Himanshu Singh</u>	
OOPS in Java	Riya Bansal	
Pattern Matching Algorithm	Riya Bansal	
Probability and Expected Values	<u>Triveni Mahatha</u>	
Recursion	Sanket Singh	
Searching	<u>Sanket Singh</u> , <u>Robin</u>	
Segment Trees	<u>Utkarsh Gupta</u> , <u>Triveni Mahatha</u> , <u>Tanuj Khattar</u>	
Shortest Path Algorithms	Triveni Mahatha, Pulkit Chhabra	
Spanning Trees	Rohit Mazumder, Pulkit Chhabra	
Stack & Queues	Riya Bansal	
Stack & Queues		
Tips n Tricks of Competitive Coding	<u>Arnab Chakraborty</u>	

Indian Programming Camp

Trees using Problems Solving

Trie Data Structure

Whether you're a beginner, an intermediate or an advanced programmer, we have a track for each of you to help level up.

<u>Riya Bansal</u>

Triveni Mahatha

Course	Topics	Course Link
Beginner Track	 Basic Programming Constructs Problem Solving Basics Complexity Theory Basic Mathematics Stacks & Queues Sorting & Searching Mastering C++ STL Recursion and Backtracking Dynamic Programming Basics Graph Theory Basics 	<u>Link</u>
Intermediate Track	 - Trees - Segment Trees - Game Theory - Intermediate Dynamic Programming - String Hashing - Square Root Decomposition - Queries on Trees - DFS and BFS Spanning Trees - Basic/Intermediate number theory 	<u>Link</u>
Advanced Track	 Persistent Data Structures Linear Algebra Biconnectivity Suffix Arrays Centroid Decomposition Flows FFT and Variants Segment Tree Beats DP Optimizations 	Link

CodeChef is a competitive programming community

About CodeChef | Contact Us CodeChef uses SPOJ © by Sphere Research Labs

CodeChef Wiki

The time now is: 06:50:42 PM Your IP: 106.219.178.219

In order to report copyright violations of any kind, send in an email to copyright@codechef.com **CodeChef** - A Platform for Aspiring Programmers

CodeChef was created as a platform to help programmers make it big in the world of algorithms, computer programming, and programming contests. At CodeChef we work hard to revive the geek in you by hosting a programming contest at the start of the month and two smaller programming challenges at the middle and end of the month. We also

Community) and lots more CodeChef goodies up for grabs.

aim to have training sessions and discussions related to algorithms, binary search, technicalities like array size and the likes. Apart from providing a platform for programming competitions, CodeChef also has various algorithm tutorials and forum discussions to help those who are new to the world of computer programming. **Practice Section** - A Place to hone your 'Computer Programming Skills' Try your hand at one of our many practice problems and submit your solution in the language of your choice. Our programming contest judge accepts solutions in over 55+

programming languages. Preparing for coding contests were never this much fun! Receive points, and move up through the CodeChef ranks. Use our practice section to better

prepare yourself for the multiple **programming challenges** that take place through-out the month on CodeChef. **Compete - Monthly Programming Contests, Cook-off and Lunchtime** Here is where you can show off your computer programming skills. Take part in our 10 days long monthly coding contest and the shorter format Cook-off and Lunchtime coding contests. Put yourself up for recognition and win great prizes. Our programming contests have prizes worth up to INR 20,000 (for Indian Community), \$700 (for Global

Policy

Terms of Service

Privacy Policy

Refund Policy

Code of Conduct

Bug Bounty Program

Programming Tools Practice Problems <u>Initiatives</u> Online IDE Go for Gold <u>Easy</u> <u>Upcoming Coding Contests</u> CodeChef for Schools <u>Medium</u> College Chapters <u>Hard</u> **Contest Hosting** Problem Setting <u>Challenge</u> CodeChef for Business **CodeChef Tutorials** <u>Peer</u>

<u>School</u>

FAQ's