

Complete Competitive Programming Course

by
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Module : 1

- C/C++
- Basic I/O
- Operators (+, -, *, /, &, |, ^)
- Conditions (if/else)
- Loops (for, while, do-while)
- Array/Strings
- Greedy
- Bruteforce
- Constructive
- Functions
- Built in functions both C and C++

Class Topics

- Introduction to the course
- Introduction to computer programming
- Introduction to C programming
- Importance of Programming and problem solving
- What is a programming Contest and Importance of it?
- Writing your first program “Hello world”
- [A. I will be the one \(CodeMarshal \)](#)
- <https://algo.codemarshal.org/contests/icpc-dhaka-20/problems/K>

Practice Problems (Assignment) :

- [A. Welcome \(CodeMarshal \)](#)
- [1000. Hello World! \(beecrowd \)](#)
- All discussed problems in class

Course Materials

- Discord
- Google Classroom
- Google Calendar Event

What is Computer Program and Programming?

Computer Program is the Life of a computer.

- Windows
- Linux
- Calculator
- Game
- Google
- Facebook
- Websites (Amazon, Alibaba etc.)

What is programming language?

- C
- C++
- Java
- Python
- C#
- JavaScript

But HTML and CSS?

HTML is not a programming language

when someone says "HTML & CSS"
Best Programming Language



Call up the gang, they come
get you...

What is Competitive programming?

- Sports Programming
- Problem solving
- Programming Contest
- Online Contest (Codeforces, Atcoder, Codechef, Facebook Hacker Cup, Snack Down)
- Onsite Contest (Divisional, NCPC, ICPC Regional, ICPC west finals, ICPC World Finals)
- Interview Questions becomes easy (Google, Amazon, Facebook, Microsoft etc)
- And the most import : it is Fun (Pera nai chill)

How a bad student became a Good Software Engineer



My Life Story

- Bad student
- Don't love to read but love to do math
- Done well in SSC but didn't get admission any good collage.
- Worked hard on inter and get admitted to CU CSE
- Start Friendship with Mohaimin but refused to do Programming
- Start programming on Mobile problem with copy paste
- Lack of internet up to 2 years
- 3 year no improvement and no money to join onsite
- And finally the 4th year. Alhamdulillah the Golden time of my CP life

What is Online Judge

- [BeeCrowd](#)
- [Codeforces](#)
- [Atcoder](#)
- [Codemarshal](#)
- [LightOJ](#)
- [LeetCode](#)
- [Timus](#)
- [Uva](#)
- [SPOJ](#)
- [CSES](#)
- [Codechef](#)

Online Contests

- [Codeforces](#) (Div-4, Div-3, Div-2, Div-1)
- [Atcoder](#) (ABC, Regular, Grand)
- [CodeChef](#) (Cookoff, Lunch, Long, Starter)
- [LeetCode](#) (Weekly, Biweekly)
- [Facebook Hacker Cup](#)
- [Codechef Snackdown](#)

Onsite contest

- Divisional
- Onsite Contest
- IUPC
- NCPC
- ACM ICPC Dhaka Regional
- ACM ICPC World Finals

What is the benefit of Programming Contest

- It's fun
- Improves Problem Solving Skills
- Improve Logic
- Job Interview Call
- Easily Crack BD Job Interview Crack
- Feel Confident
- Scholarship
- Cracking Google is not that much hard for an hardcore competitive programmer

More Links

- [cf-visualiser](#)
- [stopstalk](#)
- [Paste Ubuntu](#)
- [Linkedin](#)
- [GitHub](#)
- [Shafets planet](#)
- [Emaxx](#)

Which language should I chose?

- C/C++
- Codeblocks

How to get best out of this course

- Attend daily class
- Submit assignment regularly
- Solve at least 4-5 problems on Codeforces of you max rating
- Very Beginner's will solve BeeCrowd upto 70 problems
- Solve at least 1 problem on your highest busy schedule
- Make a habit of problem solving
- Take Problem solving as a passion
- Attend programming contest regularly
- Be consistent
- Remember : Motivation will come and go, Habit of problem solving will always remain with you InShaALLAH

Be Consistent, Work Hard, Depend on ALLAH, Pray your Salah,
Recite Quran Regularly.

InShaALLAH one day Success will be yours

Programming is not a subject it is a passion,
Contest is not an exam, it is a game.