

Tutorial 2

CodeShows Team now have prepared Tutorial-2 for this Semester. This tutorial will be bit more lengthy and one level up. Make sure you complete all the tutorials before deadline, else you will find successive tutorials much more difficult to complete.

Deadline: 16 November, 2018

Further Tests will have questions directly related to these tutorials.

Compulsory for all years:

- 1: Complete Tutorial-1 before starting this tutorial.
 - 2: Watch these Videos for [CP](#)
 - 3: Setup CS50 IDE
 1. Create account on <https://www.edx.org>
 2. Open <https://cs50.io>
 3. Log in via edx and press GO
 4. Your Virtual Ubuntu System is ready.
 5. Watch this video for more info <https://www.youtube.com/watch?v=tEjbe85aZT4>
 6. From now onward you must use this IDE for all your projects.
 - 4: [geeksforgeeks courses](#) (starting 14th November)
 - A. <https://practice.geeksforgeeks.org/courses/fork-cpp>
 - B. <https://practice.geeksforgeeks.org/courses/fork-java> (1st year can skip this)
 - 5: Participating in All the contests on all the famous CP websites is mandatory.
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Following tasks to be done:

[A] For 1st year students:

- 1: HTML & CSS
 - A. <https://www.w3schools.com/html/default.asp> (Compulsory)
 - B. <https://www.w3schools.com/css/default.asp> (Compulsory)
 - C. https://www.youtube.com/watch?v=7Ht_RW5PzQQ (Compulsory)
 - D. https://www.youtube.com/watch?v=kW_LLGi3_8 (Compulsory)
 - E. <https://www.javatpoint.com/html-tutorial>
 - F. <http://htmldog.com/>
 - 2: CP (Competitive Programming) (Compulsory)
 - A. <https://www.hackerrank.com/domains/algorithms> (Tagged with Easy)
 - Warm-up
 - Implementation
 - Strings
 - B. Continue Practicing Beginner section of all the famous CP websites
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[B] For 2nd year students:

(Compulsory) - All 1st year course above should be completed by you.

1: Technology (Complete At least one section from these three)

I: HTML & CSS (recommended)

A. Complete HTML & CSS section from 1st year tutorial.

B. Assignment- Create MNIT website similar to <http://www.mnit.ac.in> (Compulsory)

II: Java

A. Complete 3 Sectins from <https://www.javatpoint.com/java-tutorial>

-Java Tutorial

-Control Statements

-Java Object Class

B. <https://www.youtube.com/playlist?list=PLsyeobzWxl7oZ-fxDYkOToURHhMuWD1BK>

C. Book: Java Complete Reference

(<http://iiti.ac.in/people/~tanimad/JavaTheCompleteReference.pdf>)

III: Python

A. <http://cs50.tv> (Lecture 8-9 and complete corresponding problem sets) (Compulsory)

B. <https://www.learnpython.org/>

2: CP

A. <https://www.codechef.com/certification/prepare> (9-10 topics)

B. <https://www.geeksforgeeks.org/cpp-stl-tutorial/>

3: CS50

A. <http://cs50.tv> (up-to Lecture 3 and complete corresponding problem sets)

[C] For 3rd year students:

(Compulsory) - All 1st year and 2nd year course above should be completed by you.

1. Technology (All sections are mandatory)

I: Java

A. Complete 6 Sections from <https://www.javatpoint.com/java-tutorial>

-Java Tutorial

-Control Statements

-Java Object Class

-Java Inheritance

-Java Polymorphism

-Java Abstraction

B. <https://www.youtube.com/playlist?list=PLsyeobzWxl7oZ-fxDYkOToURHhMuWD1BK>

C. Book: Java Complete Reference

(<http://iiti.ac.in/people/~tanimad/JavaTheCompleteReference.pdf>)

II: Python

A. <http://cs50.tv> (Lecture 8-9 and complete corresponding problem sets)

B. <https://www.learnpython.org/>

2. CP

A. <https://www.codechef.com/certification/prepare> (9-10 topics)

B. <https://codeforces.com/blog/entry/13529>

Terms Used-

CP: Competitive Programming

Famous CP websites

[codechef](#)

[codeforces](#)

[hackerrank](#)

[hackerearth](#)

[projecteuler](#)

[spoj](#)

[a2oj](#)

[topcoder](#)

[atcoder](#)

[csacademy](#)

[uva.onlinejudge](#)

Good IDEs

[codechef](#)

hackerrank

[ideone](#)

"Measuring programming progress by lines of code is like measuring aircraft building progress by weight." - Bill Gates

Tutorial 3