

DevSkill - CP - Beginner - Course Outline

*CCC = Cumulative Class Count

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Topic	*CC	*CCC
<ul style="list-style-type: none"> Basic Computer Fundamentals <div> <div>Components of Computer</div> <div>Variable creation procedure inside hardware</div> <div>Number system and thinking problems based on it</div> </div> 	1 class	1
<ul style="list-style-type: none"> Online Judges and Code Sharing Sites <div> <div>IDE vs Compiler</div> <div>Introduction to various OJs</div> <div>Introduction to code sharing sites</div> </div> 	1 class	2
<ul style="list-style-type: none"> First Program in C++ <div> <div>Coding conventions and headers</div> <div>C++ Input/Output</div> <div>C++ Comments and Macro</div> </div> 	1 class	3
<ul style="list-style-type: none"> Operators <div> <div>Logical and conditional operators</div> <div>Bitwise operators and applications</div> </div> 	2 classes	5
<ul style="list-style-type: none"> Loops <div> <div>Types of loops in C++</div> <div>Application of loops to reduce duplicacy of code</div> </div> 	1 class	6

<ul style="list-style-type: none">Arrays and Strings <table><tr><td>Introduction and how to take I/O of arrays and strings</td></tr><tr><td>String operations: <code>length()</code> , <code>compare()</code> , <code>concat()</code> , <code>copy()</code> , <code>reverse()</code> etc</td></tr><tr><td>Concept of subarray, subsequence, substring etc</td></tr><tr><td>Palindromic array/ substring, anagram</td></tr></table>	Introduction and how to take I/O of arrays and strings	String operations: <code>length()</code> , <code>compare()</code> , <code>concat()</code> , <code>copy()</code> , <code>reverse()</code> etc	Concept of subarray, subsequence, substring etc	Palindromic array/ substring, anagram	2 classes	8
Introduction and how to take I/O of arrays and strings						
String operations: <code>length()</code> , <code>compare()</code> , <code>concat()</code> , <code>copy()</code> , <code>reverse()</code> etc						
Concept of subarray, subsequence, substring etc						
Palindromic array/ substring, anagram						
<ul style="list-style-type: none">Usage of function/method	1 class	9				
<ul style="list-style-type: none">Complexity analysis <table><tr><td>Time Complexity Analysis</td></tr><tr><td>Memory Complexity Analysis</td></tr></table>	Time Complexity Analysis	Memory Complexity Analysis	1 class	10		
Time Complexity Analysis						
Memory Complexity Analysis						
<ul style="list-style-type: none">Binary Search and application	2 classes	12				
<ul style="list-style-type: none">Sorting <table><tr><td>Bubble Sort</td></tr><tr><td>Insertion Sort , Selection Sort</td></tr><tr><td>Counting Sort , Intro Sort</td></tr><tr><td>Application</td></tr></table>	Bubble Sort	Insertion Sort , Selection Sort	Counting Sort , Intro Sort	Application	2 classes	14
Bubble Sort						
Insertion Sort , Selection Sort						
Counting Sort , Intro Sort						
Application						
<ul style="list-style-type: none">Structures/Classes	1 class	15				
<ul style="list-style-type: none">Recursion	2 classes	17				
<ul style="list-style-type: none">Number Theory	3 classes	20				
<ul style="list-style-type: none">Combinatorics	1 class	21				
<ul style="list-style-type: none">Greedy	1 class	22				
<ul style="list-style-type: none">Summing Up <table><tr><td>Full course overview</td></tr><tr><td>General Q/A</td></tr></table>	Full course overview	General Q/A	1 class	23		
Full course overview						
General Q/A						

<div data-bbox="300 205 1104 268">Glimpse of the next course</div>		
TOTAL NUMBER OF CLASSES:		23

***There will be 1(one) reserved class for revision of specific topic / problem solving sessions from the whole course.**