

DevSkill - CP - Intermediate - Course Outline

*CCC = Cumulative Class Count

*CC = Class Count

Topic	*CC	*CCC						
<ul style="list-style-type: none">Complexity Analysis	1 class	1						
<ul style="list-style-type: none">Basic Data Structure with STL (Stack,Queue,Map,Set,Priority Queue)	2 classes	3						
<ul style="list-style-type: none">Binary Search + various implementations	2 classes	5						
<ul style="list-style-type: none">Bitwise Operation	1 class	6						
<ul style="list-style-type: none">String: Various concepts, String hashing	2 classes	8						
<ul style="list-style-type: none">Sorting Algorithm : Part 1 Insertion Sort + Counting Sort	1 class	9						
<div><ul style="list-style-type: none">Number Theory<table><tr><td>Part 1</td><td>Primality Testing and GCD</td><td>1 class</td></tr><tr><td>Part 2</td><td>Different type of Sieve, Modular Arithmetic, Euler Totient Function</td><td>1 class</td></tr></table></div>	Part 1	Primality Testing and GCD	1 class	Part 2	Different type of Sieve, Modular Arithmetic, Euler Totient Function	1 class	2 classes	11
Part 1	Primality Testing and GCD	1 class						
Part 2	Different type of Sieve, Modular Arithmetic, Euler Totient Function	1 class						
<div><ul style="list-style-type: none">Recursion<table><tr><td>1</td><td>Introduction</td></tr><tr><td>2</td><td>Problem Solving</td></tr></table></div>	1	Introduction	2	Problem Solving	3 classes	14		
1	Introduction							
2	Problem Solving							
<div><ul style="list-style-type: none">Sorting Algorithm : Part 2<table><tr><td>Merge Sort</td><td>1 class</td></tr><tr><td>Quick Sort</td><td>1 class</td></tr></table></div>	Merge Sort	1 class	Quick Sort	1 class	2 classes	16		
Merge Sort	1 class							
Quick Sort	1 class							
<ul style="list-style-type: none">Segment Tree	2 classes	18						
<ul style="list-style-type: none">Greedy Technique	1 class	19						

<ul style="list-style-type: none"> Basic Graph Theory 		4 classes	23
Introduction	1 class		
BFS/DFS	1 class		
Weighted Graph : Dijkstra	1 class		
DSU	1 class		
*each class includes problem solving			
<ul style="list-style-type: none"> Backtracking 		3 classes	26
Introduction	1 class		
Problem Solving	1 class		
<ul style="list-style-type: none"> Dynamic Programming 		5 classes	31
Introduction	1 class		
Problem Solving	3 classes		
TOTAL NUMBER OF CLASSES:		31	

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