Curriculum for CCIP 2021 (April -- June)

L1: Introduction (5 to 10 April)

We will talk about placements, various platforms and areas to work & general discussion.

L2: Basic Codes 1 (12 to 17 April)

We will discuss basic codes that can be asked directly or indirectly in coding rounds of Interviews.

1. Swapping without using a third variable.
2. Palindrome
3. Armstrong Number
4. Prime Number
5. Check nth bit is set or not

L3: Basic Codes 2 (19 to 24 April)

We will discuss basic codes that can be asked directly or indirectly in coding rounds of Interviews.

1. Count Set Bits
2. Count Digits in number
3. Factorial & trailing zeros in factorial
4. GCD & HCF of two numbers
5. Sieve of Eratosthenes

L4: Arrays (26 April to 1 May)

We will cover Creation, Insertion, Deletion, Updation, Traversal and a few problems.

1. Find min & max in the array.
2. Creation of Vector.

L5: Recursion (3 to 8 May)

We will cover Tail/Non-Tail Recursion with examples.

1. Sum of N natural number using recursion
2. Palindrome check using recursion
3. Tower of Hanoi problem

L6: Searching (10 to 15 May)

We will cover linear & binary search algorithms.

1. Majority Element
2. Square Root Problem.

L7: Sorting (17 to 22 May)
We will cover Insertion, Merge & Quick sort Algorithms.

L8: Strings (24 to 29 May)
We will cover mostly used String function, Palindrome check, anagram & anagram search, lexicographic rank of string.

L9: Linked List (31 May to 5 June)
We will cover Insertion, Deletion, Updation and Reversal of singly Linked List.

L10: Stack (7 to 12 June)
We will cover creation, PUSH, POP & balanced parentheses problems.

L11: Queue (14 to 19 June)
We will cover creation, enqueue, dequeue, reversal of a queue.

L12: Problem Discussion (21 June onwards)