- **Newcomers**
    - **DataTypes/Conditions**
    - **Loops**
    - **Arrays**
    - **String**
    - **Functions, basic Recursion, and Complexity analysis (Intro)**
    - **Adhocs**

- **Juniors #1**
    - **STLs**
    - **Static Range Queries (prefix & Freq array)**
    - **Binary Search**
    - **Two Pointers**
    - **Bits & Bit-Masking**
    - **Math :**
        i. **Binary Exponentiation & Mod inverse using Fermat's little theorem**
        ii. **Primes & Factors, Gcd & Lcm**
        iii. **Sieve of Eratosthenes**
    - **Recursion & Backtracking**
    - **Intro to Graph Theory (BFS - DFS)**

- **Juniors #2**
    - **Dynamic Programming #1 (knapsack - building output)**
    - **Dynamic Programming #2 (Ranges)**
    - **Dynamic Programming #2 (Digits && Masks)**
    - **Iterative DP**
    - **DP with DS && memory reduction**

Range Queries:

- **Sparse Table**
- **SQRT Decomp && Mo's algo**
- **Fenwick tree**
- **Segment Tree**
- **Segment Tree (Lazy Propagation)**
- **Merge Sort Tree && implicit Segment tree**
- **Binary Trie**
- **Persistent Data Structures (SegTree & BT)**

Trees:

- **LCA - Euler tour/Binary lifting**
- **Queries on Tree and DFS order – (Segment Tree & BIT & Mo's)**
- **Small to large (DSU on tree or Sack)**
- **Centroid Decomposition**
- **Heavy light decomposition**

String Processing:

- **KMP / Z-algorithm / DP with KMP**
- **String Hashing**
- **Trie / Aho-corasick**
- **Manacher's algorithm**
- **Suffix Array**
- **Suffix Automata**
- **Palindromic tree**

General Techniques:

- **Parallel Binary Search**
- **Dynamic Connectivity**
- **Matrix Exponentiation**

Graph:

- **Graph: Representation and Traversal (DFS/ BFS)**
- **(DFS/BFS) App and Flood fill**
- **Dijkstra**
- **DSU/ MST**
- **LCA**
- **Bellman / Floyd**
- **SCCs / Articulation points**
- **// TODO**