

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

## GDSC Problem Solving Plan

### Firstly :

Knowing the level of all participates (Basics - Intermediate - Advanced)

### Basics :

- 1- What is programming & Printing
- 2- Variables
- 3- Conditions
- 4- Arrays
- 5- Loops
- 6- Functions
- 7- Struct

### Intermediate :

- 1- STLS (Vector – Queue – etc...)
- 2- Data structure

Arrays – Stack – Queue – Linkedlist – (Tree – Graph) => Basics .

### 3- Algorithms

Time Complexity – Space Complexity

Sorting Algorithms

- 1- Selection
- 2- Insertion
- 3- Bubble
- 4- Merge
- 5- Quick

## Searching

- 1- Linear Search
- 2- Binary Search

## Advanced :

- 1- DFS – BFS
- 2- Dynamic Programming (DP)
- 3- Backtracking
- 4- Some of more advanced algorithms

## Secondly :

- Solving a Problems to practice to all of these from Codeforces Sheets – Leetcode .
- Make a problems competitions for participates .
- Making a sessions to teaching the participates These concepts .
- The Session will be weekly and the day will be determined when meeting with the team .

Finally this program we will help ourselves to doing it

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