Team Name: DS02

Mentors:

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Participants (Active):

S No.	NAME	EMAIL	TECH STACK
1	arshdeep kaur	singh.arsh2201@gmail.com	
2	Anmol Kaur	anmolkaurminhas@gmail.com	C/C++, Python, Html, CSS, Javascript
3	Anushka Bhagchandani	anushka2001feb@gmail.com	C++, Python , HTML ,CSS
4	Anshika Govil	govilanshika2@gmail.com	C/C++, Java, Python, HTML, CSS, JavaScript
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6	Anushka Jha	anushkajha.aga@gmail.com	C/C++,python, HTML, CSS, Javascript
7	Ananya Nagar	ananyanagar32@gmail.com	C,Core Java
8	Apeksha		

Course Structure:

Week 1 and 2	**1. ANALYSIS OF ALGORITHMS** ● Analysis of Algorithm ● Asymptotic Notations

	● Best, Average and Worst case explanation through a program. ● Big O Notation ● Omega Notation ● Theta Notation ● Analysis of common loops ● Single, multiple and nested loops ● Space Complexity ● Practice Problems ● This section will contain many practice problems for the participants which are considered important and must-do as far as Data Structure and Algorithms are concerned. **2. MATHEMATICS** **3. BIT MAGIC** **4. RECURSION** **5. ARRAYS** **6. SEARCHING** ● Linear/Binary search and related problems
Week 3	**7. SORTING** ● QuickSort, Mergesort, Counting sort, Insertion Sort, Heap Sort, Comparator **8. MATRIX** ● Transpose,Rotate,Spiral Traversal,Boundary Traversal
Week 4	**9. LINKED LIST** ● Singly,Doubly,Circular, Then Problems
Week 5	**10. STACK** ● Applications,Implementation, Then Problems **11. QUEUE** ● Introduction and applications, Problems
Week 6 & 7	**12. TREE** ● Binary Tree, Binary Search Tree, AVL TREE, RED BLACK TREE, B TREE **13. HASHING** **14. HEAP**
Week 8	**15. GRAPHS** ● BFS, DSF
Week 9	**16. IMPORTANT ALGORITHMS** Dynamic Programming, Greedy Algorithms, Divide & Conquer
Week 10 onwards - Final	**17. ADVANCED DATA STRUCTURE** Segment Tree, Trie, Advanced Lists

Submission	---Refining Projects---

Project: As per participants’ choice