

DSA-<https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2>

PLATFORM-LEETCODE,HACKERRANK

OOPS-<https://www.geeksforgeeks.org/java/object-oriented-programming-oops-concept-in-java/>

PLATFORM-VS CODE

DBMS-https://www.w3schools.com/sql/sql_intro.asp

PLATFORM—HACKERRANK

APTITUDE-<https://www.youtube.com/@FeelFreetoLearn>

HTML,CSS,JS

1.Personal Portfolio Website

2.Simple Calculator

3.To-Do List

DSA

Sure! Here's the DSA topics in the correct learning order:

- 1. Time and Space Complexity**
- 2. Arrays**
- 3. Strings**
- 4. Recursion**
- 5. Sorting Algorithms**
 - **Bubble, Selection, Insertion**
 - **Merge Sort, Quick Sort**
- 6. Searching Algorithms**
 - **Linear Search**
 - **Binary Search**
- 7. Linked Lists**

- **Singly Linked List**
- **Doubly Linked List**
- **Circular Linked List**

8. Stacks

9. Queues

- **Simple Queue**
- **Circular Queue**
- **Priority Queue**
- **Deque**

10. Hashing / HashMap / HashSet

11. Two Pointers & Sliding Window Techniques

12. Mathematics for DSA

- **Prime numbers, GCD, LCM, Modular Arithmetic**

13. Bit Manipulation (Basics)

14. Trees

- **Binary Tree**
- **Binary Search Tree (BST)**
- **Tree Traversals**
- **LCA, Height, Diameter, Balanced Trees**

15. Heaps (Min Heap / Max Heap)

16. Graphs

- **Representation (Adjacency List/Matrix)**

- **BFS, DFS**
- **Topological Sort**
- **Dijkstra's Algorithm**
- **Cycle Detection**

17. Greedy Algorithms

18. Backtracking

- **N-Queens, Sudoku Solver, Subsets, Permutations**

19. Dynamic Programming

- **Memoization & Tabulation**
- **0/1 Knapsack, LIS, LCS, etc.**

20. Tries (Optional but Useful)

21. Disjoint Set / Union-Find (Optional)

22. Segment Tree / Fenwick Tree (Optional, Advanced)