

# cover all the main resources like neetcode striver leetcode apna love bubber in internet cover main resources then give me the patterns of "strings"

Here's a complete guide to **main string DSA resources** on the internet, highlighting core guides by NeetCode, Striver (takeUforward), LeetCode official, Apna College (Shradha Khapra), and Love Babbar. After that, you'll find a categorized, interview-focused **list of string patterns**.

# **Main DSA String Resources (By Top Educators)**

| Resource                                | Platform/Medium  | String Guide/Sheet/Playlist                 | Features/Highlights                                       |
|---|--|---|---|
| NeetCode                                | [Website] <sup>[1]</sup> ,<br>[YouTube] <sup>[2]</sup> | Leetcode 150 (String),<br>Video Solutions   | Concise patterns, Blind 75, decode/encode [3] [4] [5] [6] |
| Striver<br>(takeUforward)               | [takeuforward.org] [7]<br>[8] [9]                      | A2Z DSA Sheet, Tutorials on String Matching | Wildcard, DP, Pattern<br>Search, String algos             |
| LeetCode                                | [LeetCode Practice] [10]                               | String Problem List                         | 250+ real company interview<br>Qs                         |
| Apna College                            | [YouTube Playlist] [11] [12] , [Notes] [13]            | DSA Placement Series:<br>Strings, Notes     | Hindi/English, string basics to advanced                  |
| Love Babbar                             | [DSA Sheet] [14] ,<br>[YouTube] [15] [16]              | 450 DSA Sheet, Full String<br>Series        | C++, Python focus, string tricks & edge                   |
| AlgoMaster,<br>Educative,<br>ByteByteGo | Blogs, video series not in big 5                       | "15 Patterns", "Top<br>Interview Strings"   | Extra—help connect related problems                       |

# **Essential String Patterns for Interview Prep**

Mastering these patterns covers 90% of string-based LeetCode/interview problems.

## 1. Two Pointers/Sliding Window

- Reverse a String, Remove Duplicates
- Check/Build Palindrome
- Move/Remove Characters, Substrings
- Example: Valid Palindrome, [Remove All Occurrences] [15]

#### 2. Hash Map/Set for Frequencies or Uniqueness

- Longest Substring Without Repeating
- All Anagrams/Permutations in String
- Group Anagrams
- Example: [Permutation in String] [15], [Longest Substring...] [17]

# 3. Dynamic Programming on Strings

- Edit Distance (Levenshtein)
- Wildcard/Regular Expression Matching
- Longest Common Subsequence/Substring
- Example: [Wildcard Matching] [8] [16], [Regular Expression] [4]

## 4. String Construction/Compression

- Encode & Decode Strings (Custom Rules)
- String Compression/Decompression
- Example: [Encode & Decode] [3], [String Compression] [15]

# 5. Pattern Finding (KMP, Rabin-Karp, Naive)

- Substring Match/Search
- · Pattern vs. Text Find
- Example: [Pattern Searching Intro] [9], [Substring Matching] [18] [5]

#### 6. Stack-Based Approaches

- Remove Adjacent Duplicates
- Balanced Parentheses
- Example: [Remove Adjacent Duplicates] [15]

#### 7. Sorting & Custom Order

- Grouping By Anagram/Characters
- Sort by Frequency/Occurrence
- Example: [Maximum Occurring Character] [15]

#### **Problem Mapping Example Table**

| Pattern                  | Core Interview Problems   |  |  |
|--------------------------|---|--|--|
| Two Pointers/Window      | Reverse string, palindrome check, remove adjacent, substring window |  |  |
| Map/Set & Frequency      | Anagrams, longest substring w/o repeat, permutation-in-string       |  |  |
| DP, Pattern Match        | Edit distance, wildcard, regex, subsequence                         |  |  |
| Construction/Compression | Encode/decode, string compression                                   |  |  |
| Stack                    | Remove adjacent duplicates, valid parentheses                       |  |  |
| Sort/Custom              | Max/first/last occurring char, group anagrams                       |  |  |

- **Best Method:** Pick one pattern, solve 3-5 problems each from these official/YouTube sheets, then move to the next pattern. This gives you full "pattern chain" mastery (i.e., how a tweak in one leads to another).
- Check each educator's sheet/video notes for code templates and problem ladders for chaining interview questions [11] [15] [12] [16] [13] [14].
- For every pattern try relevant problems on LeetCode's dedicated [string page] [10].

These resources and patterns are the backbone for string mastery in interviews and real-world coding.



- 1. https://neetcode.io
- 2. https://www.youtube.com/@NeetCode/videos
- 3. <a href="https://neetcode.io/problems/string-encode-and-decode">https://neetcode.io/problems/string-encode-and-decode</a>
- 4. https://neetcode.io/problems/regular-expression-matching
- 5. <a href="https://www.youtube.com/watch?v=7K2BjgjCFDo">https://www.youtube.com/watch?v=7K2BjgjCFDo</a>
- 6. <a href="https://neetcode.io/practice?tab=neetcode150">https://neetcode.io/practice?tab=neetcode150</a>
- 7. https://takeuforward.org/strivers-a2z-dsa-course/must-do-pattern-problems-before-starting-dsa/
- 8. https://takeuforward.org/data-structure/wildcard-matching-dp-34/
- 9. https://takeuforward.org/string/introduction-to-pattern-searching-strings/
- 10. <a href="https://leetcode.com/problem-list/string/">https://leetcode.com/problem-list/string/</a>
- 11. <a href="https://www.youtube.com/watch?v=MOSjYaVymcU">https://www.youtube.com/watch?v=MOSjYaVymcU</a>
- 12. <a href="https://www.youtube.com/watch?v=VXewy91P0S4">https://www.youtube.com/watch?v=VXewy91P0S4</a>
- 13. <a href="https://www.apnacollege.in/notes">https://www.apnacollege.in/notes</a>
- 14. https://www.geeksforgeeks.org/dsa/dsa-sheet-by-love-babbar/
- 15. <a href="https://www.youtube.com/watch?v=Wdjr6uoZ0e0">https://www.youtube.com/watch?v=Wdjr6uoZ0e0</a>
- 16. <a href="https://www.youtube.com/watch?v=OgovJ9CB0hl">https://www.youtube.com/watch?v=OgovJ9CB0hl</a>
- 17. <a href="https://blog.algomaster.io/p/15-leetcode-patterns">https://blog.algomaster.io/p/15-leetcode-patterns</a>

| 8. <u>https://leetcod</u> |  |  |  |
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