

Li-Mat Soft Solutions Pvt. Ltd.

Day - 2

- 1. Anti-clockwise rotate a matrix by 90 deg.
- 2. Check if a String is Palindromic or not.
- 3. Convert a sentence into its equivalent mobile numeric keypad sequence.
- 4. Check if strings are isomorphic or not.
- 5. Do Tail Call Elimination For Quick Sort.

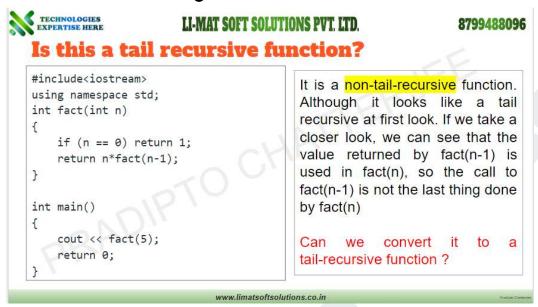
6. Given two strings 'str1' and 'str2' of size m and n respectively. The task is to remove/delete and insert the minimum number of characters from/in str1 to transform it into str2. It could be possible that the same character needs to be removed/deleted from one point of str1 and inserted at some another point.

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Input :
str1 = "heap", str2 = "pea"
Output :
Minimum Deletion = 2 and Minimum Insertion = 1
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7. Convert the following function to Tail Recursive Function.



- **8.** Given two strings s1 and s2, return the length of their longest common subsequence. If there is no common subsequence, return 0.
- 9. Continued from the previous Question, Print the LCS of the given two strings.
- 10. Given two strings str1 and str2, return the shortest string that has both str1 and str2 as subsequences. If there are multiple valid strings, return any of them.

Input: str1 = "abac", str2 = "cab"

Output: "cabac"

Explanation:

str1 = "abac" is a subsequence of "cabac" because we can delete the first "c".

str2 = "cab" is a subsequence of "cabac" because we can delete the last "ac".

The answer provided is the shortest such string that satisfies these properties.