605.420 Foundations of Algorithms Project 3

Design and implement algorithms to solve the longest common subsequence problem (chapter 15.4). Be sure to include your own test cases.

S1 = ACCGGTCGACTGCGCGGAAGCCGGCCGAA
S2 = GTCGTTCGGAATGCCGTTGCTCTGTAAA
S3 = ATTGCATTGCATGGGCGCGATGCATTTGGTTAATTCCTCG
S4 = CTTGCTTAAATGTGCA

Compare each of the provided strings to each other and your test cases. Compare by pairs only, finding the LCS of the pair.

In the writeup be sure to consider your experiences with the problem and also consider the efficiency. Don't forget to review the programming assignments guidelines.

Here is a related YouTube video you might interesting "A Dynamic Programming Algorithm - Sequence Alignment " - By Tim Roughgarden https://www.youtube.com/watch?v=fXfLU0QOfj8