1. Given two strings, $C_1$ and $C_2$, we wish to compute the number of times that $C_1$ appears as a subsequence of $C_2$. For example, if $C_1 = 'ab'$ and $C_2 = 'aacceb'$, $C_1$ appears in as two distinct subsequences of $C_2$ (one in 'aacceb' and the other 'acceb'). Explain how we can use a Dynamic Program similar to the one we used to compute the Longest Common Subsequence to solve this problem.

2. CLRS Problem 15-6.