**Longest Common Subsequence**

#include<bits/stdc++.h>

int lcs(string s, string t) {

int m = s.length();

int n = t.length();

vector<vector<int>> dp(m + 1, vector<int>(n + 1, 0));

for (int i = 1; i <= m; i++) {

for (int j = 1; j <= n; j++) {

if (s[i - 1] == t[j - 1]) {

dp[i][j] = 1 + dp[i - 1][j - 1];

} else {

dp[i][j] = max(dp[i - 1][j], dp[i][j - 1]);

}

}

}

return dp[m][n];

}