class Solution {

public:

int longestCommonSubsequence(string text1, string text2) {

vector<vector<int>> DP(text1.size() + 1, vector<int>(text2.size() + 1, 0));

for (int i{1}; i <= text1.size(); i++) { // For every letter in text 1, compare it to a letter in text 2

for (int j{1}; j <= text2.size(); j++) {

if (text1[i - 1] == text2[j - 1]) {

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

} else { // Not the same

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

}

}

}

return DP.back().back();

}

};