int editDistance(string s1, string s2) {

int m = s1.size();

int n = s2.size();

int dp[m + 1][n + 1];

memset(dp, 0, sizeof(dp));

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

dp[0][i] = i;

}

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

dp[i][0] = i;

}

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

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

if (s1[i - 1] == s2[j - 1]) {

dp[i][j] = dp[i - 1][j - 1]; // no operation required as characters are the same

}

else {

dp[i][j] = 1 + min(dp[i - 1][j - 1], // substitution

min(dp[i][j - 1], // insertion

dp[i - 1][j])); // deletion

}

}

}

return dp[m][n];

}