

583 Delete operation for two strings

allowed operations

Basic DP Question

- delete one character of string

$dp[i][j] \rightarrow$ min cost of steps required to make strings $str1(1..i)$ $str2(1..j)$ equal

if $str1(i) == str2(j)$: ^{eg:} sea ka

$$dp(i)(j) = dp(i-1)(j-1)$$

else :

$$dp(i)(j) = \min \left(\begin{array}{l} 1 + dp(i-1)(j) \\ 1 + dp(i)(j-1) \end{array} \right)$$

$dp(i)(j)$

seas

keak

$$dp(i)(j) = \min \left(\begin{array}{cc} \text{seas} & \text{keak} \\ 1 + dp(i-1)(j) & 1 \\ 1 + dp(i)(j-1) & \\ \text{seas} & \text{keak} \end{array} \right)$$

