- HW 4 posted Due Oct 9th 4:40 in class.
  1. Programming Assignment
  2. Hand-in problem.

- Final Exam
  Mon at ~4pm

Longest Common Subsequence.

Input: two sequences

$X = \langle x_1, \ldots, x_m \rangle$

$Y = \langle y_1, \ldots, y_m \rangle$.

$c[i,j]$ = length of the LCS of $\underline{X_i}$ and Y_j

$$c[i,j] = \begin{cases} 0 & \text{if } i=0 \text{ or } j=0. \\ c(i-1,j-1)+1 & \text{if } i>0 \text{ and } j>0 \text{ and } x_i = y_j \\ \max(c(i-1,j), c(i,j-1)) & \text{if } i>0 \text{ and } j>0 \text{ and } x_i \neq y_j \end{cases}$$