Reading Quiz #8

This is a preview of the published version of the quiz

Started: Nov 1 at 2:16p.m.

Quiz Instructions

Read section 6.6 in your textbook. This quiz is short because of Thursday's midterm.

Question 1 — 1 pts

Section 6.6: Sequence Alignment

Given n-character sequence X and m-character sequence Y, we can perform sequence alignment with dynamic programming by constructing a $(n+1) \times (m+1)$ matrix F. For an example of such matrix, look at figure 6.18 of page 284 of your textbook.

What is the value of $F(i,j)$ of the above matrix?

- ○ Minimum alignment cost of X[1...i] and Y[1...j]
- ○ Maximum cost of a path from (0,0) to (i,j) in the corresponding graph of F.
- ○ Maximum number of matched characters in X[1...i] , Y[1...j]
- ○ None of the above

Question 2 — 1 pts

Section 6.6 Sequence Alignment

When the algorithm computes the entry $F(i,j)$ of the matrix, which other entries does it need to access?

- ○ $F(i-1,j)$ and $F(i,j-1)$.

- $F(i-1, j)$, $F(i, j-1)$ and $F(i-1, j-1)$.
- All entries of the form $F(i-k, j-1)$ where $1 \leq k \leq i-1$ and $F(i-1, j-l)$ where $1 \leq l \leq j-1$.
- All entries of the form $F(k, l)$ where $1 \leq k \leq i-1$ and $1 \leq l \leq j-1$.

No new data to save. Last checked at 2:17pm

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