Assignment 3: Dynamic Programming (B1)

Section B1

Given two strings *s* and *t* with lengths *m* and *n* respectively, *and* match, mismatch and gap scores, implement dynamic programming algorithms to find optimal global sequence alignment and local sequence alignment of the two strings. Both algorithms must run time O(*mn*).

For details on the algorithms and sample input-output, please see
https://en.wikipedia.org/wiki/Needleman%E2%80%93Wunsch_algorithm
https://en.wikipedia.org/wiki/Smith%E2%80%93Waterman_algorithm

Input format:
The first line of input file will contain string lengths and the scores separated by spaces. The next lines will contain two strings.

7 8 1 -1 -1
GCATGCT
GATTACAA

Due: 15/10/2017

Apologies for the late announcement. Assignments for other sections will be uploaded soon.