

Alignment Exercise

CMSC423 Fall 2014

November 10, 2014

Name(s):

UID(s):

Question 1. Calculate an optimal global alignment for strings **canon** and **gannon** with parameters: match 2, mismatch -1, gap -5. Show DP graph (don't need to fill scores in completely), indicate path for resulting alignment, and write the final alignment.

Question 2. (a) Would we get the same answer with mismatch penalty -10? (b) Would we get the same answer with mismatch penalty -100? (c) What is the smallest mismatch penalty that gives alignment in (b)?

Question 3. Calculate an optimal local alignment for the same strings with the Same parameters as Problem 1. Show DP graph and final alignment.