CS3000: Algorithms & Data — Summer 2025 — Laney Strange

APP 5
Due: May 29th, 2025 @ 11:30am via Gradescope

Name:

- APPs will be assigned towards the end of roughly two lectures each week. You'll put together a solution to a short problem that we'll all use in the following lecture. We'll have time set aside to do these in class, or you can work on your own.
- You may handwrite your solutions, or typeset them in LaTeXor another system.
- APPs will be graded on completeness. They must be submitted by 11:30am (just before lecture) on the due date. They will not be accepted late, but we drop 3 of them (out of 8 total).
- Collaboration is strongly encouraged for APPs!

Problem 1.

This problem refers to the DP algorithm we covered in class to find a Longest Common Subsequence. Draw the c table that would result from calling LCS-LENGTH on the sequences $X =< N, E, N, T, H, O >, Y =< E, N, O, E, N, H >$. We've started the outline for you, below.

	y_j	E	N	O	E	N	H
x_i	0	0	0	0	0	0	0
N	0						
E	0						
N	0						
T	0						
H	0						
O	0						