Day 4

Created a text editor to allow for text manipulation and ease of use.

* Looked into algorithms such as CYK algorithm, which is used for parsing context-free grammars.
* Looked at the minimum edit distance algorithm, which works as follows:
  + Given two strings, the source string X of length n, and target string Y of length m, we’ll define D(i, j) as the edit distance between X[1..i] and Y[1.. j], i.e., the first i characters of X and the first j characters of Y. The edit distance between X and Y is thus D(n,m). We’ll use dynamic programming to compute D(n,m) bottom up, combining solutions to subproblems. In the base case, with a source substring of length i but an empty target string, going from i characters to 0 requires i deletes. With a target substring of length j but an empty source going from 0 characters to j characters requires j inserts.