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- What was easy about this assignment?

Finding MLE probabilities for the unigram and bigram models was relatively easy.

Setting up Add-1 smoothing for both models was also a relatively easy task.

- What was challenging about this assignment, or parts that you couldn't get working correctly?

Finding the perplexity of the models was a bit challenging. With the help of Dr. Bloodgood's explanation of the computation in log space and office hour explanations, we were able to compute the perplexity of our language models.

- What did you like about this assignment?

Because it was easy to compute the probabilities, it was cool and exciting to generate sentences using those probabilities.

- What did you dislike about this assignment?

The implementation for sentence generation was frustrating.

- How did your team function? Include details regarding what each team member contributed, how the team communicated with each other, and how team software development & design was accomplished.

Most of the asynchronous communication was done via text messages. All synchronous communication took place via zoom. Lana was the team lead. She organized all synchronous meetings and managed responsibilities. We used live sharing during the zoom meetings to contribute to the code, and we used GitHub to track our changes. Everyone contributed to the logic for the MLE bigram and unigram models. Lana, Jared, and Ben typed out the coding for tasks T1-T4 and were responsible for debugging the code (done over live share). Humza completed the T5-T8 analysis and the D3 deliverable. Ben was responsible for documenting the code. Lana completed the D4 deliverable. We all checked the T5-T8 analysis, the D3 deliverable, the D4 deliverable, and the code documentation for any errors to ensure that we were all on the same page. Each team member contributed various creative ideas on implementing functions and other parts of the project. The team worked extremely well together. We were able to bounce ideas off of each other and use each members' strengths to advance, elevate and test the final product.

- What did you learn from this assignment?

From this assignment, we learned how to create very basic language models. Unigram and bigram language models were created and were then used to generate sentences. Additionally, we were able to understand perplexity on a higher level.