A2 Written Part By: Diego Crisafulli

I found that in a dictionary-based N+7 approach, every noun in a text is replaced by the noun that appears seven places later in an alphabetically sorted dictionary. This method can produce unexpectedly or in my case surreal shifts in meaning. For instance, if "bird" appears in my dictionary at position 8000 and "birdhouse" is at position 8007, then "bird" transforms into "birdhouse." Even though that change may feel whimsical, it retains a slight thematic link by relating to "bird," in a quirky manner. When I experimented with different offsets like N+5 or N+10, I noticed that smaller offsets often produce altered texts that remain closer in spirit to the original. Even though the particular words were changed, pieces of the poem's original imagery remain. Larger offsets, such as N+10 or N+15, push words further away from their nearest alphabetical neighbors, resulting in more dramatically laughable replacements that can seem completely different from the original poetry. For example, if we used p+15, "bird" would become "biretta".

Furthermore, if I had to implement p+7 based on probability, I would start by systematically identifying every noun in the text via part-of-speech tagging. For each noun, we feed the preceding context into GPT-2, retrieve the top k predicted tokens, pick the seventh highest-likelihood token, and replace the original noun. Because the model's seventh guess is less probable than the top guess, the overall text becomes more surprising yet still understandable. I would probably take the model we made in class and give ChatGPT the prompt "this code predicts the next token, more specifically the 10 most probable words that comes next in the sentience, use this logic to replace all the nouns with their seventh-highest probability alternative in the poem (insert's poem)."