To evaluate the performance and flexibility of my AI text completion application, I tested it using five different prompts. These prompts were chosen to reflect different domains, including creativity, instructional content, and explanations. Each prompt was entered through the terminal, with max token and temperature values manually input. This allowed me to observe how parameter adjustments influence the model's output. The first prompt I tested was "Once upon a time, there was a robot who", entered with a high temperature of 1.0 and a token limit of 50. The output was imaginative and coherent, a direct result of the high temperature setting, which encouraged creativity and risk taking. The second prompt, "Explain photosynthesis to a 10 year old", used a moderate temperature of 0.5 and a higher token limit of 250. The response was exceptionally well structured. The explanation was accurate and easy to follow. This test confirmed that the model excels at delivering factual information in simplified formats when provided enough space and a balanced level of randomness. For the third test, I prompted the model to "Write a haiku about the ocean" with a low temperature of 0.3 and a tight token limit of 25. The result was a fully formed and appropriately structured haiku. The low temperature helped keep the output precise and focused, reinforcing the model's ability to adhere to constraints when creativity is slightly muted. The fourth prompt, "What do bees do?", was tested with a very low token count of 10 and a minimal temperature of 0.1. The model began a factual response but was abruptly cut off, demonstrating a key limitation: when the token limit is too low, the output lacks completion and usefulness. This shows that although the model can remain on topic with a low temperature, an insufficient token budget can be a hindrance. Lastly, I tested the instructional prompt "Teach me how to make a peanut butter and jelly sandwich" with 50 tokens and a temperature of 0.0. The model responded clearly at first, but had the same kind of output outcome as the fourth prompt. Across all five tests, the model generally performed well in scenarios that required clear, factual, or structured responses. Instructional and informational prompts were handled well. Creative prompts also generated strong results when higher temperatures and sufficient token budgets were used. However, the model struggled with very short token limits. It also exhibited reduced variation and personality at low temperatures. These findings highlight the importance of matching parameter values to the intent of the prompt, creative tasks benefit from looser constraints, while technical or educational tasks need tighter control. To improve the application further, I might consider implementing automatic suggestions or constraints for token and temperature ranges based on the prompt type. Adding the option for user feedback could also inform a follow-up prompt. Moreover, adding logic to detect cutoff responses could alert users to increase the token limit when necessary. This experimentation confirms that my AI text completer is capable of handling a wide range of prompt types with reasonable control over tone and output quality. By allowing the manipulation of max tokens and temperature, I've enabled flexibility that gives users direct influence over the model's behavior. With minor enhancements and safeguards, this application could be expanded into a more robust and user-friendly Al assistant.

#### Prompt 1:

Enter a prompt for the AI to use (or 'Exit' to exit): Once upon a time, there was a robot who Enter max tokens (10–512): 50 Enter temperature (0.0–1.0): 1.0

Sending request to Cohere...

#### Generated response:

Once upon a time, there was a robot named Zephyr who lived in a bustling city of the future. Unlike the other robots, Zephyr was curious and dreamed of understanding the human world. While his peers were content with their programmed tasks, Zephyr often

#### Prompt 2:

Enter a prompt for the AI to use (or 'Exit' to exit): Explain photosynthesis to a 10 year old Enter max tokens (10–512): 250 Enter temperature (0.0–1.0): 0.5

Sending request to Cohere...

## Generated response:

Sure! Imagine you have a tiny factory inside the leaves of plants. This factory is super cool because it can make food for the plant using just three simple things: sunlight, water, and air (specifically, a gas called carbon dioxide that's in the air).

Here's how it works:

- 1. \*\*Sunlight\*\*: The leaves catch sunlight, which gives the factory the energy it needs to work.
- 2. \*\*Water\*\*: The plant sucks water up from the ground through its roots, and this water goes to the leaves.
- 3. \*\*Carbon Dioxide\*\*: The plant takes in carbon dioxide from the air through tiny holes in its leaves.

Inside the leaves, the sunlight, water, and carbon dioxide mix together in a special way. The sunlight helps turn the water and carbon dioxide into glucose (a type of sugar that the plant uses as food) and oxygen. The glucose is like the plant's lunch, giving it energy to grow. And the oxygen? The plant doesn't need it, so it releases it into the air for us and other animals to breathe.

So, in simple terms, photosynthesis is how plants make their own food using sunlight, water,

## Prompt 3:

Enter a prompt for the AI to use (or 'Exit' to exit): Write a haiku about the ocean Enter max tokens (10–512): 25 Enter temperature (0.0–1.0): 0.3

Sending request to Cohere...

Generated response:

Waves whisper secrets, Endless blue meets boundless sky, Life's rhythm in tide.

### Prompt 4:

Enter a prompt for the AI to use (or 'Exit' to exit): What do bees do? Enter max tokens (10–512): 10 Enter temperature (0.0–1.0): 0.1

Sending request to Cohere...

## Generated response:

Bees are incredibly important and fascinating creatures that

# Prompt 5:

Enter a prompt for the AI to use (or 'Exit' to exit): Teach me how to make a peanut butter and jelly sandwich

Enter max tokens (10–512): 50 Enter temperature (0.0–1.0): 0.0

Sending request to Cohere...

# Generated response:

Making a peanut butter and jelly (PB&J) sandwich is a simple and classic process. Here's a step-by-step guide to help you create a delicious PB&J sandwich:

### \*\*Ingredients:\*\*

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