3.1.3 Hands-On Practice

Try crafting prompts with instructions for the following scenarios:

1. Generating a short story about overcoming the fear of heights
2. Creating a guide to exploring Tokyo, Japan
3. Writing a product description for a wireless keyboard
4. Generating a limerick about a talking dog
5. Writing a beginner's guide to learning photography
6. Writing a character description for a fantasy novel

For each scenario, focus on providing clear instructions that define the task you want the language model to perform.

3.2 Context

Contextual information is a fundamental element of prompt design that provides the background information and setting necessary for the language model to generate accurate and relevant responses. By including context in your prompts, you help the model understand the domain, scope, and purpose of the task at hand. Contextual information can include details about the intended audience and the specific topic or subject matter.

When designing prompts, it's essential to structure the information effectively. A common prompt template includes the context followed by the instruction, like this:

PROMPT TEMPLATE

```

Additional Context: {context}
Instruction: {instruction}
```

Contextual prompting is a method that expands upon adding context by using special contextual prompt patterns. This technique involves providing the language model with additional information to guide its output. Some common contextual prompting patterns include:

- Zero-shot prompting: Providing the model with a task and relevant context without any examples.
- Few-shot prompting: Including a few examples of the desired output along with the task and context.
- Contrastive few-shot prompting: Providing the model with both positive and negative examples to help it distinguish between desired and undesired outputs.

The examples in this section illustrate zero-shot prompting, where the model is given a task and relevant context without examples. Subsequent chapters will delve into contextual prompting in greater detail.

For now, let's focus on the importance of context in prompt design.

3.2.1 Practical Example 1: Generating a News Article

You need to generate a short news article about recent developments in renewable energy for a major news outlet.

PROMPT

```
You are a journalist working for a major news outlet. Generate a short news article. The
article should be about recent developments in renewable energy, covering the latest
technological advancements, government policies, and the potential impact of renewable
energy on the environment and economy.
```

GENERATED CONTENT

```
Breakthroughs in Renewable Energy Promise Economic and Environmental Transformation
Cutting-edge advancements in renewable energy are propelling the world towards a
sustainable future. Recent breakthroughs in solar panel efficiency and wind turbine
design showcase remarkable strides in technology. Government policies globally are
increasingly favoring renewables, aiming to reduce carbon footprints and foster economic
growth. Experts foresee these developments not only mitigating climate change but also
revitalizing economies through job creation and energy independence. The era of
renewable energy is dawning, promising a cleaner, more prosperous future for all.
```

The user's prompt provides context about the journalist's role, the article's topic (renewable energy), and the key points to cover (technological advancements, government policies, and potential impact). The generated output is a concise news article that briefly covers the main points mentioned in the prompt.

In the previous example, we saw how context can be used to guide the model in generating a news article. Now, let's explore how context can be applied in a creative writing scenario, such as generating dialogue for a science fiction novel.

3.2.2 Practical Example 2: Generating Dialogue for a Science Fiction Novel

You want to generate dialogue for a scene in a science fiction novel where the protagonist, Captain Aria Nova, is confronting her rival.

PROMPT

```
Additional Context: In a science fiction novel, the protagonist, Captain Aria Nova, is
known for her quick wit, sarcasm, and unwavering determination. She is confronting her
rival, Commander Zephyr, aboard a spaceship.
Instruction: Generate 2-3 lines of dialogue for this scene. The dialogue should reflect
the tension between the characters and Aria's personality traits.
```

GENERATED CONTENT

```
Aria: "Well, well, if it isn't Commander Zephyr. I thought I smelled something rotten on
my ship."
Zephyr: "Captain Nova, your insolence knows no bounds. I'm here to put an end to your
meddling once and for all."
Aria: "Bring it on, Zephyr. I've faced worse than you and come out on top."
```

The user's prompt follows the template by first providing context about the characters (Aria and Zephyr), the setting (a spaceship in a science fiction novel), and Aria's personality traits (quick wit, sarcasm, and determination). The instruction then clearly specifies the task of generating 2-3 lines of dialogue that reflect the tension between the characters and Aria's personality traits. The generated dialogue effectively showcases Aria's sarcastic and determined personality while maintaining the tense atmosphere between the characters.

Context is a fundamental element of prompt design that helps the language model understand the background information, domain, scope, and purpose of the task at hand. By providing relevant contextual information, such as details about the intended audience and the specific topic or subject matter, you enable the model to generate more accurate and relevant responses. Effective incorporation of context in your prompts is essential for guiding the language model towards the desired output, making it a key aspect of prompt engineering.

3.2.3 Hands-On Practice

Try crafting prompts with instructions and contextual information for the following scenarios: