

# Introduction

Welcome to our comprehensive hands-on handbook content section, designed to help you master the fundamentals of prompt engineering. This page provides a detailed guide to implementing Prompt engineering techniques in code, using the Azure OpenAI API.

## Objective

Following are the objectives of this section:

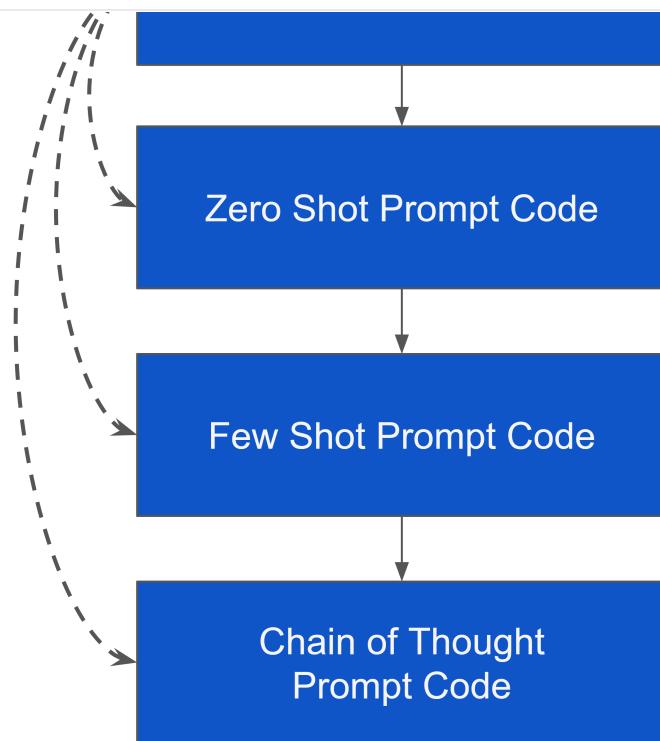
- **Set up the Azure OpenAI API for prompt engineering applications:** You'll have a solid understanding of how to set up the Azure OpenAI API for prompt engineering applications. You'll be able to create an Azure account, install required libraries and dependencies, authenticate and authorize API requests, and configure your environment to make API calls to the OpenAI service.
- **Prompting techniques code walkthrough:** Gain code implementation knowledge zero-shot, few-shot, and chain of thought prompting techniques using code snippets. You'll learn how to read Python code to implement each technique, modify and adapt them to suit specific use cases, and understand the strengths and limitations of each approach.
- **Understand the underlying concepts and principles of each prompting technique:** Understanding the role of context and prior knowledge in prompting, going in-depth of why and how of each approach, and being able to check the capabilities and responses of different prompting techniques.
- **Apply learned concepts using examples:** Use example code and datasets to experiment with different prompting techniques and evaluate their effectiveness. Getting Hands-On approach to prompting with python notebooks.

## Section Structure

This section is divided into four parts, each focusing on a specific aspect of prompt engineering:

- 1. Azure API Setup:** Learn how to set up the Azure OpenAI API, a crucial step in utilizing prompt engineering techniques.
- 2. Zero Shot Prompt:** Explore the code approach for zero-shot prompting, a technique that enables models to perform tasks without prior training data.
- 3. Few Shot Prompt Code:** Delve into the code implementation of few-shot prompting, which involves tweaking models with a limited amount of training data.
- 4. Chain of Thought Code:** Discover the code approach for chain of thought prompting, a method that encourages models to think step-by-step and provide more accurate responses.





By exploring these steps in the mentioned sequence, you'll gain a thorough understanding of prompt















