#### **REPORT**

### **Approach 1: Chain of Thought Technique**

This approach involves the model following a logical chain of thought based on the dish name and provided ingredients. It resulted in an accurate and detailed task tree for the dish "I Want to Cook", effectively capturing the required steps and any necessary ingredient substitutions. However, it may struggle with overly complex dish names or unconventional ingredients.

### **Approach 2: Few Shots Technique**

In this approach, the model is shown a few task tree examples and asked to generalize from them to generate a new task tree. While it succeeded in generating a task tree, it lacked depth and accuracy for specific dishes.

Additionally, it may not capture unique steps required for certain dishes, leading to incomplete or inaccurate task trees.

#### **Approach 3: Zero-shot Technique**

The zero-shot technique involves asking the model to generate a task tree without any examples or prior training. This approach offers flexibility and creativity but can result in less structured or inaccurate task trees due to the lack of guidance or context provided to the model.

# **Approach (Chain of Thought Technique)**

my approach follows the same Chain of Thought technique, involving a logical chain of thought based on the dish name and ingredients. Similar to my approach, it resulted in an accurate and detailed task tree for the dish "I Want to Cook". However, it may also struggle with complex dishes or unconventional ingredients.

## **Best Prompting Approach: Chain of Thought Technique**

After analyzing the performances of the various prompting approaches, Chain of Thought Technique stands out as the best approach for generating an accurate and detailed task tree. It effectively captured the required steps and handled ingredient substitutions, making it the preferred approach for task tree generation.

While the Few Shots and Zero-shot techniques have their merits, such as generalization and creativity, respectively, they may not provide the same level of accuracy and detail as the Chain of Thought Technique. Therefore, approach is considered the most effective for generating task trees based on the given dish name and available ingredients.