**NLP Integration in "Find the Treasure"**

**Command Structure**The commands are divided into movement and tool-switching commands, along with a help function:

* **Movement Commands**: Players can navigate the game grid using directional keywords like "Up," "North," "Down," "South," "Left," "West," "Right," and "East." For example, saying "Move up" or just "Up" will shift the player character in the desired direction.
* **Tool Switching Commands**: Players can switch tools by using specific keywords. For example, saying "shears," "1," or "scissors" will change the player's tool to shears. Other tools like shovels, axes, and pickaxes can be activated similarly with their corresponding keywords.
* **Help Command**: Using keywords like "answer," "help," or "path" prompts the game to highlight the optimal route, assisting players during gameplay.

**Challenges Faced**

1. **Keyword Recognition**: It was crucial to accurately identify a range of phrases and synonyms.
2. **Ambiguity in Commands:** Players could provide vague inputs, requiring the system to anticipate alternative commands.

**Potential Improvements**

1. **Advanced Understanding**: Incorporating improved NLP techniques for more intricate interactions.
2. **Adding more command**s: Adding more commands to enrich gameplay options.
3. **Adding more alerts to make the game feel more interactive**: Implementing mechanisms to adapt based on player inputs.