## **Hangman Project Documentation**

## **My Thought Process**

The goal was to create a Hangman game that greets the user, selects a random word, displays the word length, handles guesses, tracks progress, and let's the user play the game again if they want.

I have had lots of experience gathering user input, manipulating strings, and looping through data. I chose to code this in python because of the simple and organized layout and ease of gathering user input.

I broke down the game into key components:

- Word Selection: A list of 10 words I made up, and one gets randomly chosen.
- User Interaction: Functions for input and game state display.
- Game Logic: Checking guesses, updating the word, and determining game completion.

## My Code Implementation

- **1. Greeting and Instructions:** My code starts out with a simple greeting and instructions for the user.
- **2. Word Selection:** Using random.choice, I selected a word from a list of strings I made.
- **3. Displaying Word Length:** I displayed the word length to the user then showed the word using underscores to represent each letter.
- **4. Handling User Guesses:** I insured the input was a single letter using len() and that the letter wasn't already guessed.
- **5. Updating the Game State:** Replacing underscores with correct letters was tricky. I used a loop to check each character and update the display accordingly.
- **6. Providing Feedback:** For each guess, I displayed the current state of the word, guessed letters, and counts of correct and incorrect guesses.
- **7. Checking for Game Completion:** I checked if there were any underscores left to determine if all the letters have been guessed and the game is over.
- **8. Offering to Play Again:** Prompted the user to play again or quit after each game.

**Time Spent:** I spent 1 hour and 54 minutes in total on this challenge.