Hangman Game

Hangman is a popular word-guessing game where players try to guess a secret word by suggesting letters within a certain number of attempts. The game typically involves a player guessing letters one at a time until they either guess the word correctly or run out of attempts.

How to Play

1. The game begins by selecting a secret word. This word is chosen by one player and kept hidden from the others.
2. The player who chose the word indicates the number of letters in the word by providing a series of underscores, each representing an unknown letter. For example, if the word is "hangman," it would be displayed as "_ _ _ _ _ _ _."
3. Another player starts guessing letters one at a time. If the guessed letter is in the secret word, all occurrences of that letter are revealed. Otherwise, the player loses an attempt.
4. The game continues until either:
   - The player successfully guesses all the letters in the word, in which case they win.
   - The player runs out of attempts, resulting in a loss.

Simplified Hangman Game in Python

To create a simplified version of the hangman game in Python, you can follow these steps:

1. Choose a list of words to serve as the secret word bank.
2. Randomly select a word from the word bank as the secret word.
3. Display the initial state of the word as underscores.
4. Ask the player to guess a letter.
5. Check if the guessed letter is in the secret word.
6. If the letter is present, reveal all occurrences of the letter in the word.
7. If the letter is not present, decrement the number of attempts remaining.
8. Repeat steps 4-7 until the player has either guessed the word or run out of attempts.
9. Display appropriate messages for winning or losing the game.

Starter Code

```python
import random

def hangman():
    # Step 1: Word bank
    word_bank = ["hangman", "game", "python", "guess"]

    # Step 2: Select a secret word
    secret_word = random.choice(word_bank)

    # Step 3: Initialize variables
    attempts = 6
    guessed_letters = []
```

```python
    # Step 4: Display initial information
    print("Welcome to Hangman!")
    print("The secret word has", len(secret_word), "letters.")

    # Step 5: Game loop

    # Final Step: End Game


hangman()
```

Sample Output

```
Welcome to Hangman!
The secret word has 7 letters.
_ _ _ _ _ _ _

Guess a letter: a
Correct guess!
a _ _ _ a _ _

Guess a letter: e
Incorrect guess!
Attempts remaining: 5

Guess a letter: i
Correct guess!
a _ _ i a _ _

Guess a letter: o
Incorrect guess!
Attempts remaining: 4

Guess a letter: t
Incorrect guess!
Attempts remaining: 3

Guess a letter: n
Correct guess!
a n _ i a n _

Guess a letter: m
Incorrect guess!
Attempts remaining: 2

Guess a letter: h
Correct guess!
a n h i a n _

Guess a letter: g
Correct guess!
```

```
a n h i a n g
```

Congratulations! You guessed the word correctly: hangman