# Hangman Game - Source Code

This is the source code for a text-based Hangman game written in Python. The game selects a random word, and the player guesses one letter at a time to uncover the word. Players have a limited number of incorrect guesses before the game ends.

## Source Code

import random  
  
# List of words for the game  
words = ['python', 'developer', 'hangman', 'challenge', 'project', 'programming', 'software']  
  
# Function to play Hangman  
def hangman():  
 # Select a random word  
 word = random.choice(words).lower()  
 guessed\_word = ['\_'] \* len(word)  
 attempts = 6 # Limit for incorrect guesses  
 guessed\_letters = set()  
  
 print("Welcome to Hangman!")  
 print(f"Guess the word: {' '.join(guessed\_word)}")  
 print(f"You have {attempts} incorrect guesses available.")  
  
 while attempts > 0 and '\_' in guessed\_word:  
 # Take input  
 guess = input("\nEnter a letter: ").lower()  
  
 if len(guess) != 1 or not guess.isalpha():  
 print("Please enter a single valid letter.")  
 continue  
  
 if guess in guessed\_letters:  
 print(f"You already guessed '{guess}'. Try a different letter.")  
 continue  
  
 guessed\_letters.add(guess)  
  
 if guess in word:  
 print(f"Good job! '{guess}' is in the word.")  
 # Update guessed word  
 for index, letter in enumerate(word):  
 if letter == guess:  
 guessed\_word[index] = guess  
 else:  
 attempts -= 1  
 print(f"Wrong guess! '{guess}' is not in the word. Remaining attempts: {attempts}")  
  
 print(f"Current word: {' '.join(guessed\_word)}")  
  
 # Check win/lose condition  
 if '\_' not in guessed\_word:  
 print("\nCongratulations! You guessed the word:", word)  
 else:  
 print("\nGame Over! The word was:", word)  
  
# Run the game  
hangman()