**CODE**

import random

def get\_word():

words = ['aerospace', 'engineering', 'airplane', 'propulsion', 'satellite', 'navigation', 'gravity', 'velocity']

return random.choice(words)

def display\_word(word, guessed\_letters):

display = ''

for letter in word:

if letter in guessed\_letters:

display += letter

else:

display += '\_'

return display

def play\_hangman():

word = get\_word()

guessed\_letters = set()

remaining\_attempts = 6

guessed\_wrong = set()

print("Welcome to Hangman!")

while remaining\_attempts > 0:

print(f"\nWord: {display\_word(word, guessed\_letters)}")

print(f"Remaining attempts: {remaining\_attempts}")

print(f"Wrong guesses: {', '.join(guessed\_wrong)}")

guess = input("Enter a letter: ").lower()

if len(guess) != 1 or not guess.isalpha():

print("Invalid input, enter a single letter.")

continue

if guess in guessed\_letters or guess in guessed\_wrong:

print("You already guessed that letter.")

continue

if guess in word:

guessed\_letters.add(guess)

if set(word) == guessed\_letters:

print(f"Congratulations! You guessed the word: {word}")

break

else:

remaining\_attempts -= 1

guessed\_wrong.add(guess)

if remaining\_attempts == 0:

print(f"Game over! The word was: {word}")

break

play\_hangman()