def calculate\_result(num1, operator, num2):

if operator == '+':

return num1 + num2

elif operator == '-':

return num1 - num2

elif operator == '\*':

return num1 \* num2

elif operator == '/':

return num1 / num2

else:

return "Invalid operator"

# Take input from the user

num1 = float(input("Enter the first number: "))

operator = input("Enter the operation (+, -, \*, /): ")

num2 = float(input("Enter the second number: "))

# Calculate the result using the calculate\_result function

result = calculate\_result(num1, operator, num2)

# Print the result for the user

print("Result:", result)

def reverse\_string(input\_string):

return input\_string[::-1]

def is\_palindrome(input\_string):

# Remove non-alphanumeric characters and convert to lowercase

processed\_string = ''.join(ch.lower() for ch in input\_string if ch.isalnum())

return processed\_string == processed\_string[::-1]

def remove\_duplicates(input\_list):

return list(set(input\_list))

def list\_sum(input\_list):

return sum(input\_list)

def remove\_element(input\_list, element):

return [x for x in input\_list if x != element]

# Testing the functions

input\_string = "hello"

print("Reverse:", reverse\_string(input\_string))

input\_string = "sosa"

print("Is Palindrome:", is\_palindrome(input\_string))

input\_list = [3, 2, 2, 4, 5]

print("Remove Duplicates:", remove\_duplicates(input\_list))

input\_list = [5, 5, 5]

print("List Sum:", list\_sum(input\_list))

input\_list = [1, 2, 6, 5, 3]

element = 3

print("Remove Element:", remove\_element(input\_list, element))

import random

def select\_word():

word\_list = ['snake', 'cherry', 'elephant', 'banana', 'tiger', 'orange'] # Predefined list of words

return random.choice(word\_list)

def play\_game():

attempts = 3

play\_again = "yes"

print("Welcome to Mystery Word!")

while play\_again.lower() == "yes":

word = select\_word()

clues = [

f"The word has {len(word)} letters.",

f"The first letter is '{word[0]}'.",

f"The word rhymes with '{word[::-1]}'."

]

print("\nClues:")

for i in clues:

print(f"- {i}")

# print("- ", i)

print(f"\nAttempts left: {attempts}")

while attempts > 0:

guess = input("Guess the word: ")

if guess.lower() == word:

print(f"Congratulations! You guessed the word '{word}'! Well done!")

break

else:

attempts -= 1

if attempts > 0:

print("Incorrect guess. Try again.")

print(f"Attempts left: {attempts}")

else:

print(f"Sorry, you ran out of attempts. The word was '{word}'.")

play\_again = input("\nDo you want to play again? (yes/no): ")

print("\nThanks for playing Mystery Word! Goodbye.")

play\_game()