# Advanced Cybersecurity Trivia Game

print("Welcome to the Advanced Cybersecurity Trivia Game!")

print("Test your knowledge with these challenging questions.\n")

score = 0

# Question 1

print("Question 1: What does the acronym 'OWASP' stand for?")

print("a) Open Worldwide Application Security Project")

print("b) Organization for Web Application Security Practices")

print("c) Official Web App Security Protocol")

answer = input("Your answer (a, b, or c): ").lower()

if answer == 'a':

print("Correct!")

score += 1

else:

print("Incorrect! The correct answer is 'a'.")

# Question 2

print("\nQuestion 2: Which of the following is a common vulnerability in the OWASP Top 10?")

print("a) Denial of Service")

print("b) Cross-Site Scripting (XSS)")

print("c) Memory Corruption")

answer = input("Your answer (a, b, or c): ").lower()

if answer == 'b':

print("Correct!")

score += 1

else:

print("Incorrect! The correct answer is 'b'.")

# Question 3

print("\nQuestion 3: What is the primary purpose of 'salting' in cryptography?")

print("a) To add randomness to hash functions")

print("b) To encrypt plaintext using a symmetric key")

print("c) To verify digital certificates")

answer = input("Your answer (a, b, or c): ").lower()

if answer == 'a':

print("Correct!")

score += 1

else:

print("Incorrect! The correct answer is 'a'.")

# Question 4

print("\nQuestion 4: Which protocol secures communications on the web using encryption?")

print("a) SSH")

print("b) HTTPS")

print("c) FTP")

answer = input("Your answer (a, b, or c): ").lower()

if answer == 'b':

print("Correct!")

score += 1

else:

print("Incorrect! The correct answer is 'b'.")

# Question 5

print("\nQuestion 5: What is a zero-day vulnerability?")

print("a) A vulnerability exploited the same day it was discovered")

print("b) A system with zero active defenses")

print("c) A publicly known vulnerability with no available patch")

answer = input("Your answer (a, b, or c): ").lower()

if answer == 'a':

print("Correct!")

score += 1

else:

print("Incorrect! The correct answer is 'a'.")

# Question 6

print("\nQuestion 6: What does 'SQL Injection' target?")

print("a) Web server configuration")

print("b) Database queries")

print("c) Network firewalls")

answer = input("Your answer (a, b, or c): ").lower()

if answer == 'b':

print("Correct!")

score += 1

else:

print("Incorrect! The correct answer is 'b'.")

# Final Score

print(f"\nYour final score is {score}/6.")

if score == 6:

print("Outstanding! You are a cybersecurity master!")

elif 4 <= score < 6:

print("Great job! You're highly knowledgeable.")

elif 2 <= score < 4:

print("Good effort! Brush up on a few topics and try again.")

else:

print("Don't worry! Study up and give it another shot.")

print("\nThank you for playing the Advanced Cybersecurity Trivia Game!")