

Lesson Guide



Cybersecurity Professional Program

Introduction to Python for Security

Exam Review

Lesson Objectives

The objective of the lesson is to practice answering questions on topics learned in the course to prepare for the final exam.

Lesson Overview

The lesson focuses on solving questions with the learners and reviewing course subjects.

Learner Level

Learners are expected to be familiar with all the topics learned up to this lesson. This includes variable types, conditions, loops, error handling, code management, recursion, and the socket library.

Lesson Notes

The idea of the questions is to ensure learners are familiar with the material covered and revisit terms and subjects they may not remember.

Content and Sample Questions

Introduction to Programming

Question 1

The correct answer is A.

Review interpretation vs. compilation processes.

Question 2

The correct answer is D.

Discuss the meaning of indentation in code.

Data Types and Conditions

Question 3

The correct answer is B.

Discuss the way iteration works in advanced data structures.

Illustrate the dictionary-appending process (key + value).

Loops

For loops: Provide an introduction to functions, including a demonstration of the ***for*** loop.

While loops: Provide an explanation of the ***while*** loop, including special statements.

Loops and conditions: Provide a demonstration of conditions within loops.

Question 4

The correct answer is B.

Discuss how ***for*** and ***while*** loops operate.

Question 5

The correct answer is D.

Explain the structure of the ***for*** loop.

File System and Error Handling

Question 6

The correct answer is C.

Review Python-related actions that can be performed on files.

Functions

Question 7

The correct answer is D.

Explain why D is the correct answer.

Question 8

The correct answer is A.

Explain the concept of scope and its effect on code.

Network Communication

Question 9

The correct answer is C.

Explain what the function encode does and why it is required.

Question 10

The answer is D.

Explain the reasoning behind the execution order.