

Python Lesson Plan

Approximately 20 hours of videos and projects.

Domain 1 - Operations using Data Types and Operators [approximately 4.25 hours of videos and projects]

Lesson	Lesson Topic and Subtopics	Objectives	Workbook Projects and Files
Pre-Assessment Assessment time - 00:16:00	Operations using Data Types and Operators: Pre-Assessment		
Lesson 1 Video time - 00:02:47 Workbook time - 00:00:00	<u>Course Opener</u> Introduction How to Study for This Exam		
Lesson 2 Video time - 00:06:36 Workbook time - 00:25:00	<u>Evaluate Data Types</u> Variables String Data Type Integer and Float Data Types Boolean Data Types	1.1 Evaluate expressions to identify the data types Python assigns to variables 1.1a Str, int, float, and bool data types	Using String Variables and the Print Command – pg. 11 Python11.sln _11a_Strings.py Integer and Float Data Types – pg. 12 Python11.sln _11a_Numbers.py Boolean Data Types – pg. 13 Python11.sln _11a_Boolean.py
Lesson 3 Video time - 00:06:56 Workbook time - 00:25:00	<u>Convert and Work With Data Types</u> Type Casting Constructing Data Structures Indexing and Slicing Operations	1.2 Perform data and data type operations 1.2a Type casting 1.2b Constructing data structures 1.2c Indexing and slicing operations	Type Casting – pg. 14 Python12.sln _12a_Type_Casting.py Constructing Data Structures – pg. 15 Python12.sln _12b_constructing_data_structures.py Indexing and Slicing Operations – pg. 16 Python12.sln _12c_Indexing_and_Slicing_Operations.py
Lesson 4 Video time - 00:13:37 Workbook time - 00:50:00	<u>Operator Sequence and Selection</u> Assignment Comparison Logical Arithmetic Identity Containment Domain 1 Exam Tips	1.3 Determine the sequence of execution based on operator precedence 1.3a Assignment 1.3b Comparison 1.3c Logical 1.3d Arithmetic 1.3e Identity 1.3f Containment 1.4 Select operators to achieve the intended results 1.4a Assignment 1.4b Comparison 1.4c Logical 1.4d Arithmetic 1.4e Identity 1.4f Containment	Assignment – pg. 17 Python13and14.sln _13a_14a_Assignments.py Comparison – pg. 18 Python13and14.sln _13b_14b_Comparisons.py Logical – pg. 19 Python13and14.sln _13c_14c_Logical.py Arithmetic – pg. 20 Python13and14.sln _13a_14a_Assignments.py Identity – pg. 21 Python13and14.sln _13a_14a_Identity.py Containment – pg. 22 Python13and14.sln _13a_14a_Containment.py
Post-Assessment Assessment time - 01:08:00	Operations using Data Types and Operators: Post-Assessment		