

Module Title : Just Enough Python

Duration : 1 day

Overview

Cloudera University's one-day Python training course will teach you the key language concepts and programming techniques you need so that you can concentrate on the subjects covered in Cloudera's developer courses without also having to learn a complex programming language and a new programming paradigm on the fly.

Audience and Prerequisites

Prior knowledge of Hadoop is not required. Since this course is intended for developers who do not yet have the prerequisite skills writing code in Scala, basic programming experience in at least one commonly-used programming language (ideally Java, but Ruby, Perl, Scala, C, C++, PHP, or Javascript will suffice) is assumed.

NOTE: This course does not teach Big Data concepts, nor does it cover how to use Cloudera software. Instead, it is meant as a precursor for one of our developer-focused training courses that provide those skills, such as Developer Training for Spark and Hadoop I or Developer Training for Apache Spark.

Objectives

- How to define, assign, and access variables
- Which collection types are commonly used, how they differ, and how to use them
- How to control program flow using conditional statements, looping, iteration, and exception handling
- How to define and use both named and anonymous (Lambda) functions
- How to organize code into separate modules
- How to use important features of standard Python libraries, including mathematical and regular expression support

Course Contents

1. Introduction
2. Introduction to Python
 - Python Background Information
 - Scope
 - Exercises
3. Variables

- Python Variables
- Numerical
- Boolean
- String
- 4. Collections
 - Lists
 - Tuples
 - Sets
 - Dictionaries
- 5. Flow Control
 - Code Blocks
 - Repetitive Execution
 - Iterative Execution
 - Conditional Execution
 - Tentative Execution (Exception Handling)
- 6. Program Structure
 - Named Functions
 - Anonymous Functions (Lambda)
 - Generator Functions
- 7. Working with Libraries
 - Storing and Retrieving Functions
 - Module Control
 - Common Standard Libraries
- 8. Conclusion