



Visualizing and Manipulating Data in Python

ANI_105d | On-Demand | Automation and Insights | ⚙️

Course Duration: 1 hour

This self-paced eLearning course is a light-hearted introduction to data manipulation and visualization in Python. Students will manipulate data sets and create data visualization using Python libraries.

Intended Audience

Those with some programming experience who are interested in data manipulation and visualization in Python.

Objectives

After completing this course, the learner will be able to:

- Describe how to extract data from the CSV format
- Use the matplotlib module to visually represent data
- Use the Python Pandas to manipulate data
- Explain how to use Pandas clean data to eliminate outliers
- Explain how to access APIs
- Describe how to extract data from the JSON format
- Describe commonly used file formats in data science

Course Prerequisites

No Prerequisites

Outline

1. Introduction
 2. Extracting and Visualizing Data
 - 2.1 Extracting and Visualizing Data
 - 2.2 Code Challenge
 3. Data Manipulation
 - 3.1 Pandas Overview
 - 3.2 Data Manipulation
 - 3.3 Code Challenge
 4. Data Analysis
 - 4.1 Data Analysis
 - 4.2 Code Challenge
 5. Working with APIs
 6. Data Visualization
 - 6.1 Visualizing Data from JSON
- Final Assessment