Python for ML/AI 1.1.

Why Python?

1.2. Setup

1.2.1. Install Python.

1.2.2. Installing packages: numpy, pandas, scipy, matplotlib, seaborn, sklearn)

1.2.3. iPython setup.

1.3. Introduction

1.3.1. Keywords and Identifiers

1.3.2. Statements, Indentation and Comments

1.3.3. Variables and Datatypes

1.3.4. Input and Output

1.3.5. Operators

1.4. Flow Control

1.4.1. If...else

1.4.2. while loop

1.4.3. for loop

1.4.4. break and continue

1.5. Data Structures

1.5.1. Lists

1.5.2. Tuples

1.5.3. Dictionary

1.5.4. Strings

1.5.5. Sets

1.6. Functions

1.6.1. Introduction

1.6.2. Types of functions

1.6.3. Function Arguments

1.6.4. Recursive Functions

1.6.5. Lambda Functions

1.6.6. Modules

1.6.7. Packages

1.7. File Handling

1.8. Exception Handling

1.9. Debugging Python

1.10. NumPy

1.10.1. Introduction to NumPy.

1.10.2. Numerical operations.

1.11. Matplotlib

1.12. Pandas

1.12.1. Getting started with pandas

1.12.2. Data Frame Basics

1.12.3. Key Operations on Data Frames.

1.13. Computational Complexity: an Introduction

1.13.1. Space and Time Complexity: Find largest number in a list

1.13.2. Binary search

1.13.3. Find elements common in two lists.

1.13.4. Find elements common in two lists using a Hashtable/Dict

1.13.5. Further reading about Computational Complexity .