



Overview

Week 1

Week 2

Week 3

Week 4

Grades

Notes

Discussion Forums

Messages

Week 2

Python Basics

Week 2

Discuss this week's modules here.

371 threads · Last post 14 hours ago

[Go to forum](#)

Sequences and Iteration



In week two you will use the lectures and the Runestone textbook to understand the basics of a few python data types - lists, strings, tuples - as well as a control structure - for loops. By the end of this week, you will be able to write more comple...

[More](#)

Key Concepts

- Predict the output of split and join operations
- Read and write expressions that use slices

[More](#)

Lists and Strings

- ✓ **Ungraded External Tool:** Single Sign On: Interactive Textbook and Practice Opportunities 1h
- ✓ **Video:** Introduction - Sequence Mutation 1 min
- ✓ **Reading:** Introduction: Sequences 10 min
- ✓ **Video:** Strings 7 min
- ✓ **Reading:** Strings 10 min
- ✓ **Video:** Lists 2 min
- ✓ **Reading:** Lists 10 min
- ✓ **Video:** Tuples 3 min
- ✓ **Reading:** Tuples 10 min
- ✓ **Video:** The Index Operator 7 min
- ✓ **Reading:** Index Operator: Working with the Characters of a String and Accessing Elements in a List 10 min
- ✓ **Reading:** Disambiguating []: Creation vs. Indexing 10 min
- ✓ **Reading:** Length 10 min
- ✓ **Video:** The Slice Operator 7 min
- ✓ **Reading:** The Slice Operator 10 min

- ✓ **Video:** Concatenation and Repetition 6 min
- ✓ **Reading:** Concatenation and Repetition 10 min
- ✓ **Video:** Count and Index 10 min
- ✓ **Reading:** Count and Index 10 min
- ✓ **Video:** Split and Join 6 min
- ✓ **Reading:** Splitting and Joining Strings 10 min
- ✓ **Graded External Tool:** Assessment: Lists and Strings 1h

Iteration

- 📖 **Reading:** Introduction: Iteration 10 min

- ▶ **Video:** The For Loop 12 min

[Resume](#)

- 📖 **Reading:** The for Loop 10 min
- 📖 **Reading:** Flow of Execution of the for Loop 10 min
- 📖 **Reading:** Strings and for Loops 10 min
- 📖 **Reading:** Lists and for Loops 10 min
- ▶ **Video:** The Accumulator Pattern 4 min
- ▶ **Video:** The Range Function 5 min
- 📖 **Reading:** The Accumulator Pattern and the Range Function 10 min
- 📖 **Reading:** (Optional) Traversal and the for Loop: By Index 10 min
- 📖 **Reading:** (Optional) Nested Iteration: Image Processing 10 min
- 📖 **Reading:** (Optional) The Gory Details: Iterables 10 min

The Way of the Programmer

- ▶ **Video:** Naming Your Variables in For Loops 3 min
- 📖 **Reading:** Naming Variables in For Loops 10 min
- ▶ **Video:** Printing Intermediate Results 4 min
- 📖 **Reading:** Printing Intermediate Results 10 min
- ▶ **Video:** Keeping Track of Your Iterator Variable and Your Iterable 4 min
- 📖 **Reading:** Keeping Track of Your Iterator Variable and Your Iterable 10 min
- 🔧 **Graded External Tool:** Assignment: Week Two 1h Due Jun 15, 10:59 AM +04
- 📖 **Practice Quiz:** Optional - What Did You Use to Practice This Week? 5 questions

