

Dictionaries

Python Basics 5

Dr. Ryan Krauss

Grand Valley State University

Introduction

- ▶ dictionaries are super powerful

Introduction

- ▶ dictionaries are super powerful
- ▶ they can seem a little weird

Introduction

- ▶ dictionaries are super powerful
- ▶ they can seem a little weird
- ▶ they more or less make up their own namespace

Introduction

- ▶ dictionaries are super powerful
- ▶ they can seem a little weird
- ▶ they more or less make up their own namespace
- ▶ object-oriented programming in Python is closely related to dictionaries

Introduction

- ▶ dictionaries are super powerful
- ▶ they can seem a little weird
- ▶ they more or less make up their own namespace
- ▶ object-oriented programming in Python is closely related to dictionaries
 - ▶ each object has its own built-in dictionary

What is a dictionary?

- ▶ a set of key/value pairs

What is a dictionary?

- ▶ a set of key/value pairs
- ▶ you use the keys to look up the values like looking-up a word in the dictionary to find its definition (key=word, value=definition)

What is a dictionary?

- ▶ a set of key/value pairs
- ▶ you use the keys to look up the values like looking-up a word in the dictionary to find its definition (key=word, value=definition)
 - ▶ the value is what you find when you look-up the key in the dictionary

What is a dictionary?

- ▶ a set of key/value pairs
- ▶ you use the keys to look up the values like looking-up a word in the dictionary to find its definition (key=word, value=definition)
 - ▶ the value is what you find when you look-up the key in the dictionary
- ▶ example:

What is a dictionary?

- ▶ a set of key/value pairs
- ▶ you use the keys to look up the values like looking-up a word in the dictionary to find its definition (key=word, value=definition)
 - ▶ the value is what you find when you look-up the key in the dictionary
- ▶ example:
 - ▶ `mydict = {'a':'hello', 'b':'ryan'}`

What is a dictionary?

- ▶ a set of key/value pairs
- ▶ you use the keys to look up the values like looking-up a word in the dictionary to find its definition (key=word, value=definition)
 - ▶ the value is what you find when you look-up the key in the dictionary
- ▶ example:
 - ▶ `mydict = {'a':'hello', 'b':'ryan'}`
 - ▶ `what is mydict['a']?`

Keys

- ▶ keys can be almost anything

Keys

- ▶ keys can be almost anything
- ▶ strings and integers make good choices, but you can also use instances of objects

Values

- ▶ values can be pretty much anything

Example File

dictionaries.py

(from python_basics_1 repository)