Introduction to Python Computer Programming

North Star High School

Unit 11

Dictionaries

# Reading Material

The text for this unit is Think Python chapter 11 (pages 103 through 114).

It is encouraged to work on your reading with the Python interpreter open on your computer, so that you can type in the examples and experiment as you read.

# Guided Reading

Please complete the following questions using the assigned reading above.

1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is like a list, but more general. (dictionary)
2. A dictionary contains a collection of indices called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and a collection of values. (keys)
3. The association of a key and a value is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (key-value pair) or sometimes an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (item)
4. In mathematical language, a dictionary represents a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from keys to values. (mapping)
5. An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is one way of performing a computation, some are better than others! (implementation)
6. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a list that contains a single element. (singleton)
7. A function that takes a value of any kind and returns an integer is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (hash)
8. A previously computed value that is stored for later use is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (memo)
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variables can be accessed from any function. (Global)

**Be sure that you are familiar with all of the definitions in the glossary (section 11.9)!**

# Assignment

1. Exercise 11.2 (invert\_dict.py)
2. Exercise 11.3 (ackermann\_memo.py)

If time allows, please complete exercise 11.5 in the textbook. (rotate\_pairs.py)