

1. How are Python dictionaries different from Python lists?

- ☐ Python lists store multiple values and dictionaries store a single value
- ☐ Python lists can store strings and dictionaries can only store words
- ☒ Python lists maintain order and dictionaries do not maintain order
- ☐ Python dictionaries are a collection and lists are not a collection

2. What is a term commonly used to describe the Python dictionary feature in other programming languages?

- ☐ Lambdas
- ☐ Closures
- ☐ Sequences
- ☒ Associative arrays

3. What would the following Python code print out?

```
1 stuff = dict()
2 print(stuff['candy'])
```

- ☐ 0
- ☒ The program would fail with a traceback
- ☐ -1
- ☐ candy

4. What would the following Python code print out?

```
1 stuff = dict()
2 print(stuff.get('candy', -1))
```

- ☒ -1
- ☐ 0
- ☐ The program would fail with a traceback
- ☐ 'candy'

5. (T/F) When you add items to a dictionary they remain in the order in which you added them.

- ☒ False
- ☐ True

6. What is a common use of Python dictionaries in a program?

- ☐ Splitting a line of input into words using a space as a delimiter
- ☒ Building a histogram counting the occurrences of various strings in a file
- ☐ Computing an average of a set of numbers
- ☐ Sorting a list of names into alphabetical order

7. Which of the following lines of Python is equivalent to the following sequence of statements assuming that **counts** is a dictionary?

```
1 ▾ if key in counts:
2     counts[key] = counts[key] + 1
3 ▾ else:
4     counts[key] = 1
```

- ☒ `counts[key] = counts.get(key,0) + 1`
  - ☐ `counts[key] = counts.get(key,-1) + 1`
  - ☐ `counts[key] = (key in counts) + 1`
  - ☐ `counts[key] = key + 1`
  - ☐ `counts[key] = (counts[key] * 1) + 1`
8. In the following Python, what does the **for** loop iterate through?

```
1 x = dict()
2 ...
3 ▾ for y in x :
4     ...
```

- ☒ It loops through the keys in the dictionary
- ☐ It loops through the values in the dictionary
- ☐ It loops through all of the dictionaries in the program
- ☐ It loops through the integers in the range from zero through the length of the dictionary

9. Which method in a dictionary object gives you a list of the values in the dictionary?

- ☐ all()
- ☒ values()
- ☐ keys()
- ☐ each()
- ☐ items()

10. What is the purpose of the second parameter of the **get()** method for Python dictionaries?

- ☒ To provide a default value if the key is not found
- ☐ The key to retrieve
- ☐ An alternate key to use if the first key cannot be found
- ☐ The value to retrieve