Chapter 9

Question 1

How are Python dictionaries different from Python lists?

○ Python dictionaries are a collection and lists are not a collection

○ 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

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Question 2

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

○ Sequences

◉ Associative arrays

○ Closures

○ Lambdas

Question 3

What would the following Python code print out?

```python
stuff = dict()
print(stuff['candy'])
```

◉ The program would fail with a traceback

○ candy

○ 0

○ -1

Question 4

What would the following Python code print out?

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

○ 0

◉ -1

○ The program would fail with a traceback

○ 'candy'

Question 5

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

● False

○ True

Question 6

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

○ Computing an average of a set of numbers

○ Sorting a list of names into alphabetical order

● Building a histogram counting the occurrences of various strings in a file

○ Splitting a line of input into words using a space as a delimiter

Question 7

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

```python
if key in counts:
    counts[key] = counts[key] + 1
else:
    counts[key] = 1
```

○ counts[key] = (counts[key] * 1) + 1

○ counts[key] = (key in counts) + 1

○ counts[key] = key + 1

○ counts[key] = counts.get(key,-1) + 1

● counts[key] = counts.get(key,0) + 1

Question 8

In the following Python, what does the **for** loop iterate through?

```python
x = dict()
...
for y in x :
    ...
```

○ 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

○ It loops through the values in the dictionary

● It loops through the keys in the dictionary

Question 9

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

○ each()

○ all()

● values()

○ items()

○ keys()

Question 10

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

○ An alternate key to use if the first key cannot be found

○ The key to retrieve

○ The value to retrieve

● To provide a default value if the key is not found