## **Chapter 10**

Total points 10

Question 1

### What is the difference between a Python tuple and Python list?

1 / 1 point

Tuples can be expanded after they are created and lists cannot

Lists are mutable and tuples are not mutable

Lists are indexed by integers and tuples are indexed by strings

Lists maintain the order of the items and tuples do not maintain order

Question 2 1 / 1 point

## Which of the following methods work both in Python lists and Python tuples?

reverse()

sort()

index()

append()

pop()

Question 3

## What will end up in the variable y after this code is executed?

1 / 1 point

1 x, y = 3, 4

3

A dictionary with the key 3 mapped to the value 4

A two item list

4

A two item tuple

Question 4

### In the following Python code, what will end up in the variable *y*?

```
1 / 1 point
```

```
1  x = { 'chuck' : 1 , 'fred' : 42, 'jan': 100}
2  y = x.items()
```

A tuple with three integers

A list of integers

A list of tuples

A list of strings

#### **Question 5**

## Which of the following tuples is greater than x in the following Python sequence?

```
x = (5, 1, 3)

(4, 100, 200)

(5, 0, 300)

(6, 0, 0)

(0, 1000, 2000)
```

#### Question 6

## What does the following Python code accomplish, assuming the c is a non-empty dictionary? 1 / 1 point

```
1   tmp = list()
2   for k, v in c.items():
3     tmp.append( (v, k) )
```

It creates a list of tuples where each tuple is a value, key pair

It computes the average of all of the values in the dictionary

It sorts the dictionary based on its key values

It computes the largest of all of the values in the dictionary

#### Question 7

If the variable *data* is a Python list, how do we sort it in reverse order?



#### data.sort(reverse=True)

```
data.sort.reverse()
data = data.sort(-1)
```

**Question 8** 

## Using the following tuple, how would you print 'Wed'?

1 / 1 point

```
days = ('Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat', 'Sun')
print(days{2})
print(days[2])
print(days[1])
print(days.get(1,-1))
print(days(2))
```

Question 9 1 / 1 point

In the following Python loop, why are there two iteration variables (k and v)?

```
1    c = {'a':10, 'b':1, 'c':22}
2    for k, v in c.items():
3    ...
```

Because the keys for the dictionary are strings

Because the items() method in dictionaries returns a list of tuples

Because there are two items in the dictionary

Because for each item we want the previous and current key

Question 10

# Given that Python lists and Python tuples are quite similar - when might you prefer to use a tuple over a list? 1 / 1 point

For a temporary variable that you will use and discard without modifying

For a list of items that want to use strings as key values instead of integers

For a list of items you intend to sort in place

For a list of items that will be extended as new items are found