Python basics assignment 4

**1. What exactly is []?**

Emplty list value

**2. In a list of values stored in a variable called spam, how would you assign the value ‘hello’ as the third value? (Assume [2, 4, 6, 8, 10] are in spam.)**

spam = [2,4,6,8,10]

spam[2]='hello'

**Let’s pretend the spam includes the list [‘a’, ‘b’, ‘c’, ‘d’] for the next three queries.**

**3. What is the value of spam[int(int(‘3’ \* 2) / 11)]?**

‘d’

**4. What is the value of spam[-1]?**

‘d’

**5. What is the value of spam[:2]?**

[‘a’,’b’]

**Let’s pretend bacon has the list [3.14, ‘cat,’ 11, ‘cat,’ True] for the next three questions.**

**6. What is the value of bacon.index(‘cat’)?**

1

**7. How does bacon.append(99) change the look of the list value in bacon?**

adds 99 to back of list [3.14, 'cat', 11, 'cat', True, 99]

**8. How does bacon.remove(‘cat’) change the look of the list in bacon?**

removes first ‘cat’ entry [3.14, 11, 'cat', True]

**9. What are the list concatenation and list replication operators?**

for concatenation + and for replication \*

**10. What is difference between the list methods append() and insert()?**

append() adds entry to end of list, insert() adds entry in anywhere in list

**11. What are the two methods for removing items from a list?**

remove(), pop(), clean()

**12. Describe how list values and string values are identical.**

in both list and string entries are sequential

**13. What’s the difference between tuples and lists?**

Lists = mutable, used in []

Tuples = immutable, used in ()

**14. How do you type a tuple value that only contains the integer 42?**

X=(42,)

**15. How do you get a list value’s tuple form? How do you get a tuple value’s list form?**

list1=[1,2,3]

tuple1 = tuple(list1)

tuple1=(1,2,3)

list1 = list(tuple1)

**16. Variables that “contain” list values are not necessarily lists themselves. Instead, what do they contain?**

Reference to list

**17. How do you distinguish between copy.copy() and copy.deepcopy()?**

copy() create reference to original object.

deepcopy() creates new object and does real copying of original object