**Assignment-2**

1. What is []? = It is a empty list.

2. How would you assign the value 'hello' as the third value in a list stored in a variable named spam? (Assume spam contains [2, 4, 6, 8, 10].)

Ans- spam.insert(2,“hello”) & spam[2]= ‘hello’

For the following three questions, let’s say spam contains the list ['a', 'b', 'c', 'd'].

3. What does spam [int(int('3' \* 2) // 11)] evaluate to?

4. What does spam[-1] evaluate to? = ‘d’

5. What does spam[:2] evaluate to? = ‘a’,’b’

For the following three questions, let’s say bacon contains the list [3.14, 'cat', 11, 'cat', True].

6. What does bacon.index('cat') evaluate to? = 1

7. What does bacon.append(99) make the list value in bacon look like? = [3.14, ‘cat’, 11, ‘cat’, True, 99]

8. What does bacon.remove('cat') make the list value in bacon look like? = [3.14, 11, ‘cat’, True, 99].

9. What are the operators for list concatenation and list replication? = + and \*

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

Ans- Append method add value at the last of the list while insert method add value at the specified index or it takes two arguments i.e. index,value.

11. What are two ways to remove values from a list?

Ans- 1. Pop 2. Remove .

12. Name a few ways that list values are similar to string values.

Ans- 1. Both are sequence data type.

2. Both are sequential and ordered.

3. Both can be replicated and concatenated.

13. What is the difference between lists and tuples?

Ans- List are mutable i.e they can be changed while tuple is immutable i.e they cannot be changed. List is shown in [] and tuple is shown in ().

14. How do you type the tuple value that has just the integer value 42 in it? = (42,)

15. How can you get the tuple form of a list value? How can you get the list form of a tuple value?

16. Variables that “contain” list values don’t actually contain lists directly. What do they contain instead?

Ans- They contain or assign memory location to the list values or assigning refrences.

17. What is the difference between copy.copy() and copy.deepcopy() ?