1. What exactly is []?

Ans: These are called square or index bracket which is used to declare items in a list

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.)

Ans: spam.insert(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)]?

Ans: d

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

Ans: d

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

Ans: ['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')?

Ans: 1

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

Ans: [3.14, 'cat,' 11, 'cat', True, 99]

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

Ans: [3.14, 'cat,' 11, True]

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

Ans: concatenation operator is ‘+’ and replication operator is ‘\*’

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

Ans: append adds the value in the last while insert does that at the specified index

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

Ans: remove and pop

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

Ans: both are ordered collection of some values string cn have only characters while list can have items of any data type.

13. What's the difference between tuples and lists?

Ans: Lists are mutable while tuples are immutable

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

Ans my\_tup = (42)

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

Ans: By using functions tupple() and list()

my\_list = ["Abhay", "Chaturvedi"]

print(my\_list)

my\_tup = tuple(my\_tup)

print(my\_tup)

my\_tup = ("Abhay", "Chaturvedi")

print(my\_tup)

my\_list = list(my\_tup)

print(my\_list)

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

Ans: These variables contain reference to list values

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

Ans: copy.copy() create reference to original object. If you change copied object - you change the original object. copy.deepcopy() creates new object and does real copying of original object to new one. Changing new deepcopied object doesn't affect original object.