1. What exactly is []?

Empty 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.)

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

spam[2]="hello"

print(spam)

'''one more way to do this is is uing insert method it will change the size of the list but the previous entry at that point will be not deleted but get shifted'''

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

spam.insert(3,"hello")

print(spam)

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)]?

‘3’\*2 implies 3 repeated twice which IS ‘33’

This can be converted to numeric value hnec ehn typcaste value is 33

33/11 gives 3 hence

It is spam[3]🡪’d’

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

‘d’🡪negative indexing start from the end with the end indexed as -1

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

From start till 2-1=1

Output is :[‘a’,’b’] ->slicing operation is being performed

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')?

.index will give the index of the first occurance which is 1

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

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

bacon=[3.14, 'cat',11, 'cat', True]

bacon.append(99)

print(bacon)

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

Will add 99 at the end of the list

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

[3.14,11,’cat’,True]🡪remove method will remove the first occurance

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

spam=[1,2,3,3]

l=[4,5,6]

new=[]

new=l+spam #list concatenation

two=[]

two=l\*3 #list repetion

print(two)

print(new)

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

Append method will at end always where as insert method has two parameters insert(position,valuetobeinderted) will be inserted at specified position and the previous value present at that position will be shifted

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

.remove()

.pop()

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

A list can contain strings in this way they are identical

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

Lists are mutable where as tuple is an immutable object

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

Single valued tuple are given as

t=(42,)

print(type(t))

PS C:\Users\jeevan\Desktop\programs in c> & "C:/Program Files (x86)/Microsoft Visual Studio/Shared/Python37\_64/python.exe" "c:/Users/jeevan/Desktop/programs in c/.vscode/inueron.py"

<class 'tuple'>

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

Use typecasting as tuple() to convert to tuple and list() to convert to list

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

They contain refernces to that list

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

Copy.copy() does shallow copy and copy.deepcopy() does deep copy