**ASSIGNMENT\_3**

1. [] represents an empty list.
2. By using spam.insert(2,”hello”).
3. ‘d’
4. ‘d’
5. [‘a’,’b’]
6. bacon.index('cat') returns 1
7. bacon.append(99) adds 99 at the end of the list

the final list looks like

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

1. bacon.remove('cat') removes the ‘cat’ from index one.

The final list looks like [3.14, 11, 'cat', True]

1. We can concatenate two lists by using the + operator.

We can replicate list by using the copy() method.

1. Append adds the required value always at the end of the list whereas insert takes two arguments index and value. It inserts the value at the I dex that we provide as an argument.
2. The two methods are pop() and remove(). The pop method when not given any argument removes the last item of the list whereas if we provide the index it removes the item of that particular index.

The remove method takes the item as an argument and removes it from the list.

1. Lists are similar to strings, which are **ordered collections of characters**, except that the elements of a list can have any type and for any one list, the items can be of different types.
2. The main difference between tuples and list is tuples are nonmutable whereas lists are mutable.
3. a=(42,)
4. by enclosing the list in tuple and vice versa

for eg. list1=[“Ineuron”,”python”,”datascience”,”pandas”]

tuple(list1) will convert this list into a tuple and vice versa.

1. In copy.copy() any changes made to the duplicate copy is reflected in the original copy whereas as in the copy.deepcopy() the changes made into the duplicate copy has no affect in the original copy.