Python basic assignment 4:

Q1) The symbol is where commands are given, code is written and inputs are given. From that point, code is translated into machine language.

Q2) spam[2] = ‘hello’

Q3) d

Q4) e

Q5) [‘a’,’b’]

Q6) 1. Index of first ‘cat’ is given.

Q7) 99 is added to the list. [3.14, 'cat', 11, 'cat', True, 99]

Q8) [3.14, 11, 'cat', True, 99]. First ‘cat’ is removed.

Q9) List concatenation gives a list by adding elements of one list to another at the end. Most commonly used operator is ‘+’ for list concatenation. Append and for loop, extend etc other operators can also be used. \* operator is used for list replication by multiplying list with an integer.

Q10) Append inserts element in last position while insert can insert element in any position.

Q11) Ways for removing ith element - del list[i], list.remove(element), list.pop(i)

Q12) Both store elements as well as addresses. Both have links that connect different parts of elements that are stored in various parts of memory. Starting point (address) of list and string is enough to open and work on entire list and string.

Q13) Tuples are immutable while lists are mutable.

Q14) tuple = (42)

Q15) #converting list to tuple

def convert(list):

return tuple(list)

list1 = [1,2,3,4,5]

convert(list1)

#converting tuple to list

tuple1 = (1,2,3,4,5)

list1 = list(tuple1)

print(list1)

Q16) Variables store references to lists.

Q17) In shallow copy (i.e. copy.copy()), only reference is copied. In deep copy (i.e. copy.deepcopy()), even clones of values are created along with copy of reference. Thus, any change in deep copied value will not affect original value. However, changes in shallow copy affect original value stored.