Python - Assignment 4

A1 These are called square brackets. In Python they are used to declare a List.

~~Def~~

```
L1 = [1, 2, 8, 'list1']
print(L1)
```

output.

=> [1, 2, 8, 'list1']

A2 given

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

Now,

=> spam.insert(2, 'hello')

print (spam)

=> output

[2, 4, 'hellow', 6, 8]

A3 3

A4 'd'

A5 ['a', 'b']

A6 1

A7 [3.14, 'cat', 11, 'cat', True, 99]

A8 [3.14, 11, 'cat', True]

A9 List Concatination

(+) operator is used for list concatination

```
L1 = [1, 2, 3]
L2 = [4, 5, 6]

L3 = L1 + L2
print ('Concatenated List L3 =' + str(L3))
```

output

Concatenated list L3 =

List Replication

There are two Methods

1. .copy()
2. .deepcopy()

A10 Append => it is used in a list to add something at the end of the list to extent the list.

. append (#whatever)

insert => it is used to add something in a list at a particular address / location.

. insert (#location, #Material)

A11 2 Methods of removing are :-

① . remove (#content_to_remove)
=> removes mention content

② . pop () => removes last item.

A12 both list and strings are :-

① Sequences
② Have lengths
③ Have addresses starting from 0 to (l-1).

A13

The major difference between tuple and lists are that, tuples are not mutable,

i.e. => Once defined a tuple cannot be altered

∴ • append()
• remove(), etc methods do not work on tuples.

A14 a = (42,) => Trailing comma with single integer tuple is necessary.

A15 ① To convert list into tuple

tuple(list) => method is used

② To convert tuple into list

list(tuple) => method is used.

A16 They might contain reference to that list.

A17