

Assignment - 04 - 191109010

Question No.01

```
In [62]: stulist = ['Ram', 'Chennai', 2017]
newlist = stulist+['CS']
print (stulist)
print (newlist)
```

```
['Ram', 'Chennai', 2017]
['Ram', 'Chennai', 2017, 'CS']
```

Question No.02

```
In [63]: stulist = ['Ram', 'Chennai', 2017]
print ("print (stulist[0])      : ",stulist[0])
print ("print (stulist[:3])     : ",stulist[:3])
print ("print (stulist[1:])     : ",stulist[1:])
print ("print (stulist[1:1])    : ",stulist[1:1])
print ("print (stulist[5:2])    : ",stulist[5:2])
print ("print (stulist[:])      : ",stulist[:])
print ("print (stulist[-2:])    : ",stulist[-2:])
print ("print (stulist[:-2])    : ",stulist[:-2])
print ("print (stulist[1:3])    : ",stulist[1:3])
```

```
print (stulist[0])      : Ram
print (stulist[:3])     : ['Ram', 'Chennai', 2017]
print (stulist[1:])     : ['Chennai', 2017]
print (stulist[1:1])    : []
print (stulist[5:2])    : []
print (stulist[:])      : ['Ram', 'Chennai', 2017]
print (stulist[-2:])    : ['Chennai', 2017]
print (stulist[:-2])    : ['Ram']
print (stulist[1:3])    : ['Chennai', 2017]
```

Question No.03

```
In [64]: stulist = ['Ram', 'Chennai', 2017]
stulist.append('CS')
print ('After Appending')
print (stulist)
```

After Appending
['Ram', 'Chennai', 2017, 'CS']

Question No.04

```
In [71]: stulist = ['Ram', 'Chennai', 2017]
dept = ['CS']
print ("Before Extend :",stulist)
stulist.extend(dept)
print ("After Extend  :",stulist)
```

Before Extend : ['Ram', 'Chennai', 2017]
After Extend : ['Ram', 'Chennai', 2017, 'CS']

Question No.05

```
In [66]: stulist = ['Ram', 'Chennai', 2017]
print ('Index of Ram      : ',stulist.index('Ram'))
print ('Index of Chennai  : ',stulist.index('Chennai'))
print ('Index of 2017     : ',stulist.index(2017))
```

Index of Ram : 0
Index of Chennai : 1
Index of 2017 : 2

Question No.06 Insert

```
In [70]: stulist = ['Ram', 'Chennai', 2017]
print ('Before insert : ',stulist)
stulist.insert(1,'CSE')
print ('After insert : ',stulist)
```

```
Before insert : ['Ram', 'Chennai', 2017]
After insert : ['Ram', 'CSE', 'Chennai', 2017]
```

Question No.07 Pop

```
In [72]: stulist = ['Ram', 'Chennai', 2017,'CSE',92.7]
print ('Initial list is : ',stulist)
print ('Popping the last item : ',stulist.pop())
print ('After popping the last item, the list is : ',stulist)
```

```
Initial list is : ['Ram', 'Chennai', 2017, 'CSE', 92.7]
Popping the last item : 92.7
After popping the last item, the list is : ['Ram', 'Chennai', 2017, 'CSE']
```

Question No.08 Pop(index)

```
In [44]: stulist = ['Ram', 'Chennai', 2017,'CSE',92.7]
print ('Initial list is : ',stulist)
print ('Popping an item with index 2 : ',stulist.pop(2))
#2 is an index of the item to be removed
print ('Now the list is : ',stulist)
```

```
Initial list is : ['Ram', 'Chennai', 2017, 'CSE', 92.7]
Popping an item with index 2 : 2017
Now the list is : ['Ram', 'Chennai', 'CSE', 92.7]
```

Question No.09 Remove

```
In [49]: stulist = ['Ram', 'Chennai', 2017, 'CSE', 92.7, 2017]
print('Initial list is          : ', stulist)
stulist.remove('CSE')
print('After removing CSE from the list : ', stulist)
stulist.remove(2017)
print('After removing 2017 from the list : ', stulist)
```

```
Initial list is          : ['Ram', 'Chennai', 2017, 'CSE', 92.7, 2017]
After removing CSE from the list : ['Ram', 'Chennai', 2017, 92.7, 2017]
After removing 2017 from the list : ['Ram', 'Chennai', 92.7, 2017]
```

Question No.10 Reverse

```
In [50]: stulist = ['Ram', 'Chennai', 2017, 'CSE', 92.7]
print('Initial list is          : ', stulist)
stulist.reverse()
print('After reversing, the list : ', stulist)
```

```
Initial list is          : ['Ram', 'Chennai', 2017, 'CSE', 92.7]
After reversing, the list : [92.7, 'CSE', 2017, 'Chennai', 'Ram']
```

Question No.11 Sort

```
In [51]: numlist = [6, 28, 11, 4, 20, 26, 13, 12]
print('Before sorting : ', numlist)
numlist.sort()
print('After sorting is : ', numlist)
```

```
Before sorting : [6, 28, 11, 4, 20, 26, 13, 12]
After sorting is : [4, 6, 11, 12, 13, 20, 26, 28]
```

Question No.12 Mutability

```
In [53]: stulist = ['Ram', 'Chennai', 2017]
print('Befor mutation : ',stulist)
stulist[0]='Priya'
print('After mutation : ',stulist)
```

```
Befor mutation : ['Ram', 'Chennai', 2017]
After mutation : ['Priya', 'Chennai', 2017]
```

Question No.13 Tuples

```
In [73]: t1 = ('C', 'C++', 'python', 1997, 2000); t2 = (1, 2, 3, 4, 5, 6, 7); t3 = ('a', 'b', 'c', 'd', 'e')
print("tup1[0] : ", t1[0])
print("tup1[1] : ", t1[1])

print("tup2[1:5] : ", t2[1:5])
print("tup2[1:] : ", t2[1:])
print(t3[0])
```

```
tup1[0] : C
tup1[1] : C++
tup2[1:5] : (2, 3, 4, 5)
tup2[1:] : (2, 3, 4, 5, 6, 7)
a
```

Question No.14 Nested Index

```
In [68]: nest_tup = ('hello', [8, 4, 6], (1, 2, 3)) #nested index
print(nest_tup[0][4])
print(nest_tup[1][2])
print(nest_tup[2][0])
```

```
o
6
1
```

