Assignment 4-List and Tuples 191109011

Q.1

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

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

Q.2

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

```
[0]: Ram
[:3]: ['Ram', 'Chennai', 2017]
[1:]: ['Chennai', 2017]
[1:1]: []
[5:2]: []
[:]: ['Ram', 'Chennai', 2017]
[-2:]: ['Chennai', 2017]
[:-2]: ['Ram']
[1:3]: ['Chennai', 2017]
```

Q.3

```
stulist=['Ram','Chennai',2017]
stulist.append('CS')
print("After appending")
print(stulist)
```

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

Q.4

```
stulist=['Ram','Chennai',2017]
dept=['CS']
```

```
dept ['CS']
print("Before Extend:",stulist)
stulist.extend(dept)
print("After Extend:",stulist)
```

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

Q.5

```
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
```

Q.6-insert

```
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]
```

Q.7-pop

```
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']
```

Q.8-pop(index)

```
stulist=['Ram','Chennai',2017,'CSE',92.7]

print('Initial list is:',stulist)
print('Popping an item with index2:',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 index2: 2017
Now the list is : ['Ram', 'Chennai', 'CSE', 92.7]
```

Q.9-remove

```
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]
```

Q.10-reverse

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

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

Q.11-sort

```
numlist=[6,28,11,4,20,24,13,12]
print('Before sorting is:',numlist)
numlist.sort()

print('After sorting is:',numlist)
```

```
Before sorting is: [6, 28, 11, 4, 20, 24, 13, 12]
After sorting is: [4, 6, 11, 12, 13, 20, 24, 28]
```

Q.12-mutability

```
stulist=['Ram','Chennai',2017]
print('Before mutation', stulist)
stulist[0]='priya'
print('After mutation',stulist)
```

```
Before mutation ['Ram', 'Chennai', 2017]
```

```
After mutation ['priya', 'Chennai', 2017]
```

Q.13-Tuples

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

```
t1[0]: c
t1[1]: c++
t2[1:5]: (2, 3, 4, 5)
t2[1:]: (2, 3, 4, 5, 6, 7)
t3[0]: a
```

Q.14

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

```
nest_tup[0][4]: o
nest_tup[1][2]: 6
nest_tup[2][0]: 1
```