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In [ ]: Jayapradha.C  
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```
In [2]: stulist = ['ram','chennai',2017]  
newlist = stulist+['CS']  
print(stulist)  
print (newlist)
```

```
['ram', 'chennai', 2017]  
['ram', 'chennai', 2017, 'CS']
```

```
In [3]: stulist = ['ram','chennai',2017]  
print(stulist[0])  
print(stulist[:3])  
print(stulist[1:])  
print(stulist[1:1])  
print(stulist[5:2])  
print(stulist[:])  
print(stulist[-2:])  
print(stulist[:-2])  
print(stulist[1:3])
```

```
ram  
['ram', 'chennai', 2017]  
['chennai', 2017]  
[]  
[]  
['ram', 'chennai', 2017]  
['chennai', 2017]  
['ram']  
['chennai', 2017]
```

```
In [4]: stulist = ['ram','chennai',2017]  
stulist.append('CS')  
print('after appending')  
print(stulist)
```

```
after appending  
['ram', 'chennai', 2017, 'CS']
```

```
In [5]: 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']
```

```
In [6]: 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
```

```
In [7]: #inset
```

```
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]
```

```
In [8]: #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']
```

```
In [10]: #pop(index)
```

```
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]
```

```
In [13]: #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]
```

In [16]: *#reverse*

```
stulist = ['ram','chennai',2017,'CSE',92.7]
print('initial list is:',stulist)
stulist.reverse()
print('after revering, the list is :',stulist)
```

initial list is: ['ram', 'chennai', 2017, 'CSE', 92.7]
after revering, the list is : [92.7, 'CSE', 2017, 'chennai', 'ram']

In [18]: *#sort*

```
numlist = [6,28,11,4,20,26,13,12]
print('before sorting:',numlist)
numlist.sort()
print('aftr sorting is:',numlist)
```

before sorting: [6, 28, 11, 4, 20, 26, 13, 12]
aftr sorting is: [4, 6, 11, 12, 13, 20, 26, 28]

In [19]: *#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]

In [25]: *#Tuples*

```
tup1 = ('C','C++','python',1997,2000);
tup2 = (1,2,3,4,5,6,7);
tup3 = ('a','b','c','d','e')
print('tup1[0]:',tup1[0])
print('tup1[1]:',tup1[1])
print('tup2[1:5]:',tup2[1:5])
print('tup2[1:]',tup2[1:])
```

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

```
In [27]: 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])
```

```
0  
6  
1
```

```
In [ ]:
```