

#1.

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

```
↳ ['Ram', 'Chennai', 2017]
   ['Ram', 'Chennai', 2017, 'cs']
```

#2

```
stulist = ['Ram','Chennai',2017]
stulist[0]
```

```
'Ram'
```

```
stulist[:3]
```

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

```
stulist[1:]
```

```
['Chennai', 2017]
```

```
stulist[1:1]
```

```
[]
```

```
stulist[5:2]
```

```
[]
```

```
stulist[:]
```

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

```
stulist[-2:]
```

```
['Chennai', 2017]
```

```
stulist[:-2]
```

```
['Ram']
```

```
stulist[1:3]
```

```
['Chennai', 2017]
```

```
#3
stulist=['Ram','chennai',2017]
stulist.append('cs')
print('after appending')
print (stulist)

after appending
['Ram', 'chennai', 2017, 'cs']
```

```
#4
stulist = ['Ram','Chennai',2017]
dept =['cs']
print("Before Extend :"),stulist
stulist.extend(dept)
print("After Extend :"),stulist

Before Extend :
After Extend :
(None, ['Ram', 'Chennai', 2017, 'cs'])
```

```
#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:
index of chennai:
index of 2017:
(None, 2)
```

```
#6
stulist=['Ram','Chennai',2017]
print('Before inster:'),stulist
stulist.insert(1,'CSE')
print('After insert:'),stulist

Before inster:
After insert:
(None, ['Ram', 'CSE', 'Chennai', 2017])
```

```
#7
stulist=['Ram','Chennai',2017,'CSE,92.7']
print('Initial list is:'),stulist
print('popping the last item : '),stulist.pop()
print('Ater Popping The Last Item,The List Is :'),stulist
```

```
Initial list is:
popping the last item :
Ater Popping The Last Item,The List Is :
(None, ['Ram', 'Chennai', 2017])
```

```
#8
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:
popping an item with index 2:
now the list is:
(None, ['ram', 'chennai', 'CSE', 92.7])
```

```
#9
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 :
after removing CSE from the list:
after removing 2017 from the list:
(None, ['ram', 'chennai', 92.7, 2017])
```

```
#10
stulist=['ram','chennai',2017,'CSE',92.7]
print('initial list is :'),stulist
stulist.reverse()
print('after reversing, the list is:'),stulist
```

```
initial list is :
after reversing, the list is:
(None, [92.7, 'CSE', 2017, 'chennai', 'ram'])
```

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

```
before mutation
after sorting is:
(None, [4, 6, 11, 12, 13, 20, 26, 28])
```

```
#12
stulist=['ram','chennai',2017]
print('before mutation'),stulist
stulist[0]='priya'
print('after mutation'),stulist
```

```
before mutation
after mutation
```

#13

```
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:]  
print("tup3[0]:")
```

```
tup1[0]:  
tup1[1]:  
tup2[1:5]:  
tup2[1:]:  
tup3[0]:
```

#14

```
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
```