

List

In [17]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
print(n)
```

```
['vino', 101, 'CSE', [56, 88], [99, 87]]
```

In [11]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
n[2]
```

Out[11]:

```
'CSE'
```

Retrieve first element of the list

In [12]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
n[3][0]
```

Out[12]:

```
56
```

In [18]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
n[0]
```

Out[18]:

```
'vino'
```

Retrieve last element of the list

In [13]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
n[-1]
```

Out[13]:

```
[99, 87]
```

In [14]:



```
n=['vino',101,'CSE',[56,88],[99,87],'bhavani']  
n[-1]
```

Out[14]:

'bhavani'

In [16]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
n[-2][-1]
```

Out[16]:

88

Slicing

Return all items 0 to 4th position

In [19]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
n[0:3]
```

Out[19]:

['vino', 101, 'CSE']

Return first three items

In [20]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
n[:1]
```

Out[20]:

['vino']

Return whole list:

In [21]:



```
n=['vino',101,'CSE',[56,88],[99,87]]  
n[:]
```

Out[21]:

['vino', 101, 'CSE', [56, 88], [99, 87]]

Add items

In [23]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
n.append(10)
n
```

Out[23]:

```
['vino', 101, 'CSE', [56, 88], [99, 87], 10]
```

Add an item in particular place

```
n=['vino',101,'CSE',[56,88],[99,87]] n.insert(3,'SSS COLLEGE') n
```

Adding element in nested list

In [27]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
n[3].append(92)
n
```

Out[27]:

```
['vino', 101, 'CSE', [56, 88, 92], [99, 87]]
```

adding elements using extend function

In [28]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
t=(99,100,98)
n.extend(t)
print(n)
```

```
['vino', 101, 'CSE', [56, 88], [99, 87], 99, 100, 98]
```

Remove items from the list

In [29]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
n.remove(101)
n
```

Out[29]:

```
['vino', 'CSE', [56, 88], [99, 87]]
```

Remove the last element of the list

In [30]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
n.pop()
n
```

Out[30]:

```
['vino', 101, 'CSE', [56, 88]]
```

Remove item in the index

In [31]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
n.pop(1)
n
```

Out[31]:

```
['vino', 'CSE', [56, 88], [99, 87]]
```

In [33]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
del n[2]
n
```

Out[33]:

```
['vino', 101, [56, 88], [99, 87]]
```

update list

In [35]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
n[0]='lingesh'
n[1]=102
n
```

Out[35]:

```
['lingesh', 102, 'CSE', [56, 88], [99, 87]]
```

change range of items

In [39]:



```
n=['vino',101,'CSE',[56,88],[99,87]]
n[0:2]=['lingesh',102]
n
```

Out[39]:

```
['lingesh', 102, 'CSE', [56, 88], [99, 87]]
```

In [1]:



```
s=['chn','mad','ban','del']
s[1:3]=['mum','karnada']
s
```

Out[1]:

```
['chn', 'mum', 'karnada', 'del']
```

In [2]:



```
s=['chn','mad','ban']
s[1:3]=['mum','karnada']
s
```

Out[2]:

```
['chn', 'mum', 'karnada']
```

In [3]:



```
s=['chn','mad','ban']
s[1:2]=['mum','karnada']
s
```

Out[3]:

```
['chn', 'mum', 'karnada', 'ban']
```

Clear all items of the list

In [4]:



```
s=['chn','mad','ban']
s.clear()
s
```

Out[4]:

```
[]
```

Copy list

In [5]:



```
d=['vinesh','gokul','sree','sanju']  
d
```

Out[5]:

```
['vinesh', 'gokul', 'sree', 'sanju']
```

In [7]:



```
d1=d  
id(d)
```

Out[7]:

```
3106534374656
```

In [8]:



```
id(d1)
```

Out[8]:

```
3106534374656
```

In [12]:



```
d2=d1  
d2
```

Out[12]:

```
['vinesh', 'gokul', 'sree', 'sanju']
```

In [13]:



```
d[0]='lingesh'  
d
```

Out[13]:

```
['lingesh', 'gokul', 'sree', 'sanju']
```

In [14]:



```
d1
```

Out[14]:

```
['lingesh', 'gokul', 'sree', 'sanju']
```

In [24]:



```
d2
```

Out[24]:

```
['lingesh', 'gokul', 'sree', 'sanju']
```

Join list

In [25]:



```
a=[1,2,3,4,5]
b=[6,7,8,9,10]
a.extend(b)
```

In []:



In [20]:



```
d=['vinesh','gokul','sree','sanju']
if 'vinesh' in d:
    print('available')
else:
    print('not available')
```

available

Reverse list

In [26]:



```
a=[1,2,3,4,5,6,7,8,9]
a.reverse()
a
```

Out[26]:

```
[9, 8, 7, 6, 5, 4, 3, 2, 1]
```

In [28]:



```
a=[9,8,7,6,5,4,3,2,1]
a=a[::-1]
a
```

Out[28]:

```
[1, 2, 3, 4, 5, 6, 7, 8, 9]
```

Count

In [30]:



```
a=[1,2,3,4,5,6,7,8,9,3,4,3,5,3,4,1,3]
a.count(3)
```

Out[30]:

5

Repeating elements of the list

In [32]:



```
a=[4,5,6]
a*4
```

Out[32]:

[4, 5, 6, 4, 5, 6, 4, 5, 6, 4, 5, 6]

Sort ascending order

In [34]:



```
n=[1,3,6,7,3,5,7,5,6,4]
n.sort()
n
```

Out[34]:

[1, 3, 3, 4, 5, 5, 6, 6, 7, 7]

In [35]:



```
d=['vinesh','gokul','sree','sanju']
d.sort()
d
```

Out[35]:

['gokul', 'sanju', 'sree', 'vinesh']

Sort descending order

In [36]:



```
d=['gokul', 'sanju', 'sree', 'vinesh']
d.sort(reverse=True)
d
```

Out[36]:

['vinesh', 'sree', 'sanju', 'gokul']

In [37]:



```
n=[1,3,6,7,3,5,7,5,6,4]
n.sort(reverse=True)
n
```

Out[37]:

```
[7, 7, 6, 6, 5, 5, 4, 3, 3, 1]
```

Case sensitive sort

In [38]:



```
n=['Lingesh','BHAVANI','Arya','Vinoth',]
n.sort()
n
```

Out[38]:

```
['Arya', 'BHAVANI', 'Lingesh', 'Vinoth']
```

In [39]:



```
n=['Lingesh','BHAVANI','Arya','Vinoth',]
n.sort(key=str.lower)
n
```

Out[39]:

```
['Arya', 'BHAVANI', 'Lingesh', 'Vinoth']
```

In [13]:



```
my_new_list=[]
for i in my_new_list:
    my_new_list.append(i * 10)
print(my_new_list)
```

In []:

