

4 th mar

```
l=[10,20,30,40,50,60]
l

[10, 20, 30, 40, 50, 60]

l1=[1,2,2,3,4,5]
l1

[1, 2, 2, 3, 4, 5]

print(l)
print(l1)

[10, 20, 30, 40, 50, 60]
[1, 2, 2, 3, 4, 5]

print(len(l))
print(len(l1))

6
6

l.append([2,3,4,5,6,'hi'])
l

[10, 20, 30, 40, 50, 60, [2, 3, 4, 5, 6, 'hi']]

for i in l:
    print(i)

10
20
30
40
50
60

l.remove(10)

l

[20, 30, 50, 60, [2, 3, 4, 5, 6, 'hi']]

l1.pop()

5

l1

[1, 2, 2, 3, 4]
```

```
l1.pop(-1)
4
l1
[1, 2, 2, 3]
l1.pop(3)
3
print(l)
print(l1)
[20, 30, 50, 60, [2, 3, 4, 5, 6, 'hi']]
[1, 2, 2]
l
[20, 30, 50, 60, [2, 3, 4, 5, 6, 'hi']]
l.insert(3,35) #insert the value before argument
l
[20, 30, 50, 35, 60, [2, 3, 4, 5, 6, 'hi'], 3]
l.extend(l1) # extend one list to another list
l1
[1, 2, 2]
print(l)
print(l1)
[20, 30, 50, 35, 60, [2, 3, 4, 5, 6, 'hi'], 3, 1, 2, 2]
[1, 2, 2]
l2=[20,30,40,40,50,60]
print(l2)
[20, 30, 40, 40, 50, 60]
l2.index(30)
1
l2.index(40)#prints the index value
2
l2.count(40) #count the value or element
```

```
2
list1=[]
print(type(list1))
<class 'list'>
list2=[10,30,60]
list3=[10.77,30.66,60.89]
list4=['one','two','three']
list5=['asif',25,[50,100],[150,90]]
list6=[100,'asif',17.765]
list7=['asif',17.765]
len(list6)
3
list2[0]
10
list4[0]
'one'
list4[0][0]
'o'
list4[-1]
'three'
list5[-1]
[150, 90]
mylist=['one','two','three','four','five','six','seven','eight']
mylist[0:3]
['one', 'two', 'three']
mylist[2:5]
['three', 'four', 'five']
mylist[2:5]
```

```
['three', 'four', 'five']
mylist[:3]
['one', 'two', 'three']
mylist[:2]
['one', 'two']
mylist[-3:]
['six', 'seven', 'eight']
mylist[-1]
'eight'
mylist[:3]
['one', 'two', 'three']
mylist[:]
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
mylist
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
mylist.append('nine')
mylist
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight',
'nine']
mylist.insert(9, 'ten')
mylist
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight',
'nine', 'ten']
mylist.insert(1, 'one')
mylist
['one',
'one',
'two',
'three',
'four',
'five',
'six',
```

```

'seven',
'eight',
'nine',
'ten']

mylist.remove('one')
mylist

['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight',
'nine', 'ten']

mylist.pop()
mylist

['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight',
'nine']

mylist.pop(8)
mylist

['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

del mylist[7]
mylist

['one', 'two', 'three', 'four', 'five', 'six', 'seven']

mylist[0]=1
mylist[1]=2
mylist[2]=3
mylist

[1, 2, 3, 'four', 'five', 'six', 'seven']

mylist.clear()
mylist

[]

del mylist
mylist

```

```

-----
-----
NameError                                Traceback (most recent call
last)
Cell In[80], line 2
      1 del mylist
----> 2 mylist

NameError: name 'mylist' is not defined

```

```
mylist=['one','two','three','four','five','six','seven','eight','nine']
mylist

['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']

id(mylist),id(mylist)
(1707607399296, 1707607399296)

mylist2=mylist.copy()
id(mylist2)
1707607400128

mylist[0]=1
mylist
[1, 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']

mylist2
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']

mylist1=mylist.copy()
mylist1
[1, 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']

list1=['one','two','three','four']
list2=['five','six','seven','eight']

list3=list1+list2
list3
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

list1.extend(list2)

list1
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

'one' in list1
True

'ten' in list1
False
```

```

if 'eleven' in list1:
    print('three is present in the list')
else:
    print('three is not present in the list')
three is not present in the list

if 'eleven' in list1:
    print('eleven is present in the list')
else:
    print('eleven is not present in the list')
eleven is not present in the list

list1
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
list1.reverse()
list1
['eight', 'seven', 'six', 'five', 'four', 'three', 'two', 'one']
list1=list1[::-1]
list1
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

mylist3=[9,5,2,99,12,88,34]
mylist3.sort()
mylist3
[2, 5, 9, 12, 34, 88, 99]

mylist3=[9,5,9,12,34,88,99]
mylist3.sort(reverse=True)
mylist3
[99, 88, 34, 12, 9, 9, 5]

mylist4=[88,65,33,21,11,98]
sorted(mylist4)
[11, 21, 33, 65, 88, 98]
mylist4
[88, 65, 33, 21, 11, 98]
list1
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

```

```
for i in list1:
    print(i)

one
two
three
four
five
six
seven
eight

for i in enumerate(list1):
    print(i)

(0, 'one')
(1, 'two')
(2, 'three')
(3, 'four')
(4, 'five')
(5, 'six')
(6, 'seven')
(7, 'eight')

list10=['one','two','three','four','one','two','three']

list10.count('one')

2

list10.count('two')

2

list10.count('three')

2

list10.count('four')

1

L1=[1,2,3,4,0]

all(L1)

False

any(L1)

True

L2=[1,2,3,4,True,False]
```



```
all(L2)
```

```
False
```

```
any(L2)
```

```
True
```

```
L3=[1,2,3,True]
```

```
all(L3)
```

```
True
```