

```
In [1]: txt=" abc def ghi "
```

```
In [3]: txt.lstrip()
```

```
Out[3]: 'abc def ghi '
```

```
In [5]: txt.strip()
```

```
Out[5]: 'abc def ghi'
```

```
In [7]: txt
```

```
Out[7]: ' abc def ghi '
```

using escape character

```
In [10]: mystr="my favourite movie is"Game of thrones""
```

Cell In[10], line 1

```
mystr="my favourite movie is"Game of thrones""
```

SyntaxError: invalid syntax

```
In [18]: mystr="my favourite movie is\"Game of thrones\""  
print(mystr)
```

```
my favourite movie is"Game of thrones"
```

```
In [20]: print(mystr)
```

```
my favourite movie is"Game of thrones"
```

LIST

```
In [42]: list1=[]
```

```
In [49]: list1.append(20)
```

```
In [51]: list1
```

```
Out[51]: [20]
```

```
In [53]: print(type(list1))
```

```
<class 'list'>
```

```
In [59]: list2=[10,30,60]
```

```
In [61]: list2
```

```
Out[61]: [10, 30, 60]
```

```
In [63]: list3=[10,77,30.66,60.89]
```

```
In [65]: list4=['one','two',"three"]
```

```
In [67]: list5=['asif',25,[50,100],[150,90]]
```

```
In [69]: list6=[100,'asif',17.765]
```

```
In [71]: list7=['asif',25,[50,100],[150,90],{'john','david'}]
```

```
In [73]: len(list6)
```

```
Out[73]: 3
```

```
In [75]: len(list7)
```

```
Out[75]: 5
```

```
In [77]: list2
```

```
Out[77]: [10, 30, 60]
```

```
In [81]: list2[0]
```

```
Out[81]: 10
```

```
In [83]: list2[4]
```

```
-----
IndexError                                Traceback (most recent call last)
Cell In[83], line 1
----> 1 list2[4]

IndexError: list index out of range
```

```
In [85]: list[4][0]
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[85], line 1
----> 1 list[4][0]

TypeError: list[4] is not a generic class
```

```
In [87]: list4[-1]
```

```
Out[87]: 'three'
```

```
In [89]: list5[-1]
```

```
Out[89]: [150, 90]
```

```
In [91]: mylist=['one','two','three','four','five','six','seven','eight']
```

```
In [93]: mylist
```

```
Out[93]: ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

```
In [95]: mylist[0:3]
```

```
Out[95]: ['one', 'two', 'three']
```

```
In [97]: mylist[0:-1]
```

```
Out[97]: ['one', 'two', 'three', 'four', 'five', 'six', 'seven']
```

```
In [99]: mylist[:-2]
```

```
Out[99]: ['one', 'two', 'three', 'four', 'five', 'six']
```

```
In [103... mylist[-3:]
```

```
Out[103... ['six', 'seven', 'eight']
```

```
In [105... mylist[:]
```

```
Out[105... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

ADD,REMOVE,&CHANGES ITEMS

```
In [110... mylist
```

```
Out[110... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

```
In [112... mylist.append('nine')
```

```
In [114... mylist
```

```
Out[114... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']
```

```
In [116... mylist.insert(9,'ten')
```

```
In [118... mylist
```

```
Out[118... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine', 'ten']
```

```
In [124... mylist.insert(1,'ONE')
```

```
In [126... mylist
```

```
Out[126... ['one',  
            'ONE',  
            'one',  
            'two',  
            'three',  
            'four',  
            'five',  
            'six',  
            'seven',  
            'eight',  
            'nine',  
            'ten']
```

```
In [141... mylist.remove('one')
```

```
In [143... mylist
```

```
Out[143... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine', 'ten']
```

```
In [145... mylist.pop()
```

```
Out[145... 'ten'
```

```
In [147... mylist.pop(8)
```

```
Out[147... 'nine'
```

```
In [149... del mylist[7]
```

```
In [151... mylist
```

```
Out[151... ['one', 'two', 'three', 'four', 'five', 'six', 'seven']
```

```
In [157... #change value of list  
mylist[0]=1  
mylist[1]=2  
mylist[2]=3
```

```
In [161... mylist
```

```
Out[161... [1, 2, 3, 'four', 'five', 'six', 'seven']
```

```
In [175... l1=[]  
mylist.copy()==l1
```

```
Out[175... False
```

```
In [177... mylist.clear()
```

```
In [179... mylist
```

```
Out[179... []
```

In [181... `del` mylist

In [183... `mylist#the list is deleted`

```
-----  
NameError                                Traceback (most recent call last)  
Cell In[183], line 1  
----> 1 mylist  
  
NameError: name 'mylist' is not defined
```

COPYLIST

In [186... `mylist=['one','two','three','four','five','six','seven','eight']`

In [188... `mylist`

Out[188... `['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']`

In [190... `id(mylist)`

Out[190... `2499511894976`

In [202... `mylist2=mylist.copy()`

In [204... `id(mylist),id(mylist2)`

Out[204... `(2499511894976, 2499512310272)`

In [206... `mylist[0]=1`

In [208... `mylist`

Out[208... `[1, 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']`

In [212... `mylist2`

Out[212... `['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']`

In [222... `mylist1=['one','two','three','four','five','six','seven','eight']`

In [224... `mylist1`

Out[224... `['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']`

In [226... `mylist1[0]`

Out[226... `'one'`

In [232... `mylist3=mylist1+mylist2`

In [236... `mylist3`

Out[236... `['one',
'two',
'three',
'four',
'five',
'six',
'seven',
'eight',
'one',
'two',
'three',
'four',
'five',
'six',
'seven',
'eight']`

In [238... `mylist.extend(mylist2)`

In [240... `mylist`

Out[240... `[1,
'two',
'three',
'four',
'five',
'six',
'seven',
'eight',
'one',
'two',
'three',
'four',
'five',
'six',
'seven',
'eight']`

LISTMEMBERSHIP

In [243... `list1=['one','two','three','four']

list2=['five','six','seven','eight']`

In [245... `list1.extend(list2)`

In [247... `list1`

Out[247... `['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']`

In [251... `'one' in list1`

Out[251... True

```
In [255... if 'three' in list1:  
    print('three is present in list1')  
else:  
    print('three doesnt exist in list1')
```

three is present in list1

reverse and sort list

```
In [258... list1
```

Out[258... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

```
In [262... list1.reverse()
```

```
In [265... list1
```

Out[265... ['eight', 'seven', 'six', 'five', 'four', 'three', 'two', 'one']

```
In [267... list1.reverse()  
list1
```

Out[267... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

```
In [271... list1[::-1]
```

Out[271... ['eight', 'seven', 'six', 'five', 'four', 'three', 'two', 'one']

```
In [273... list1[::-1]
```

Out[273... ['eight', 'seven', 'six', 'five', 'four', 'three', 'two', 'one']

```
In [277... list1[0::]
```

Out[277... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

```
In [279... list1
```

Out[279... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

```
In [281... mylist3=[9,5,2,99,12,88,34]
```

```
In [285... mylist3.sort()
```

```
In [287... mylist3
```

Out[287... [2, 5, 9, 12, 34, 88, 99]

```
In [295... mylist3=[9,5,2,99,12,88,34]#sorting in descending order  
mylist3.sort(reverse=True)
```

In [297... mylist3

Out[297... [99, 88, 34, 12, 9, 5, 2]

In [299... sorted(mylist3)*#this sorted returnd=s the sorted list without changing list*

Out[299... [2, 5, 9, 12, 34, 88, 99]

In [301... mylist3

Out[301... [99, 88, 34, 12, 9, 5, 2]

LOOP THROUGH A LIST

In [304... list1

Out[304... ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

In [312... *for i in list1:#printing the list using for loop*
print(i)

one
two
three
four
five
six
seven
eight

In [314... *for i in enumerate(list1):#enumerate prints the list with index nuymbers*
print(i)

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

COUNT

In [317... list10=['one', 'two', 'three', 'four', 'one', 'one', 'two', 'three']

In [319... list10

Out[319... ['one', 'two', 'three', 'four', 'one', 'one', 'two', 'three']

In [325... list10.count('one')

Out[325... 3


```
In [327... list10.count('two')
```

```
Out[327... 2
```

ALL/ANY

THE ALL METHOD RETURNS --> TRUE :IF ALL ELEMENTS ARE TRUE(NO '0') FALSE:IF FALSE ELEMENT IS PLACED IN A LIST(LIST HAS '0')

```
In [333... L1=[1,2,3,4,5,0]  
all(L1)
```

```
Out[333... False
```

```
In [335... all1=[1,2,3,True]
```

```
In [337... all(all1)
```

```
Out[337... True
```

```
In [ ]:
```