In [2]:
```
txt = " abc def ghi"
txt.lstrip()
```

Out[2]: 'abc def ghi'

In [3]:
```
txt = " abc def ghi "
txt.strip()
```

Out[3]: 'abc def ghi'

Using Escape character

In [4]:
```
mystr = "My favourite TV Series is "Game of Thrones""
```

```
  Cell In[4], line 1
    mystr = "My favourite TV Series is "Game of Thrones""
                                        ^
SyntaxError: invalid syntax
```

In [7]:
```
mystr = "My favourite series is \"Game of Thrones\""
print (mystr)
```

```
My favourite series is "Game of Thrones"
```

In [ ]:

List

In [ ]:

List creation

In [9]:
```
list1 = []
```

In [10]:
```
print(type(list1))
```

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

In [11]:
```
list2 = [10,30,60]
```

In [12]:
```
list3 = [10.77,30.66,60.89]
```

In [13]:
```
list4 = ['one','two',"three"]
```

In [14]:
```
list5 = ['Asif', 25, [50, 100], [150,90]]
```

In [15]:
```
list6 = [100, 'Asif', 17.765]
```

In [16]:
```
list7 = ['Asif', 25, [50, 100], [150, 90], {'John', 'David'}]
```

In [17]:
```
len(list6)
```

Out[17]: 3

In [18]:
```
list2[0]
```

Out[18]: 10

In [19]:
```
list4[0]
```

Out[19]: 'one'

In [20]:
```
list4[0][0]
```

Out[20]: 'o'

In [21]:
```
list4[-1]
```

Out[21]: 'three'

In [22]:
```
list5[-1]
```

Out[22]: [150, 90]

In [ ]:
```

```

List Slicing

In [ ]:
```

```

In [60]:
```
mylist = ['One','Two','Three','Four','Five','Six','Seven','Eight']
```

In [25]:
```
mylist[0:3]
```

Out[25]: ['One', 'Two', 'Three']

In [26]:
```
mylist[2:5]
```

Out[26]: ['Three', 'Four', 'Five']

In [27]:
```
mylist[:3]
```

Out[27]: ['One', 'Two', 'Three']

In [28]:
```
mylist[:2]
```

Out[28]: ['One', 'Two']

In [29]:
```
mylist[-3:]
```

Out[29]:
```
['Six', 'Seven', 'Eight']
```

In [30]:
```
mylist[-2:]
```

Out[30]:
```
['Seven', 'Eight']
```

In [31]:
```
mylist[-1]
```

Out[31]:
```
'Eight'
```

In [48]:
```
mylist[:]
```

Out[48]:
```
['One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight']
```

In [ ]:
```

```

Add, Remove & Change Items

In [49]:
```
mylist
```

Out[49]:
```
['One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight']
```

In [61]:
```
mylist.append('Nine')
mylist
```

Out[61]:
```
['One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight', 'Nine']
```

In [62]:
```
mylist.insert(9,'Ten')
mylist
```

Out[62]:
```
['One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight', 'Nine', 'Ten']
```

In [63]:
```
mylist.insert(1,'ONE')
```

In [64]:
```
mylist
```

Out[64]:
```
['One',
 'ONE',
 'Two',
 'Three',
 'Four',
 'Five',
 'Six',
 'Seven',
 'Eight',
 'Nine',
 'Ten']
```

In [65]:
```
mylist.remove('ONE')
mylist
```

Out[65]:
```
['One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight', 'Nine', 'Ten']
```

In [66]:
```
mylist.pop()
mylist
```

Out[66]:
```
['One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight', 'Nine']
```

In [67]:
```
mylist.pop(8)
mylist
```

Out[67]:
```
['One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight']
```

In [69]:
```
del mylist[7]
mylist
```

Out[69]:
```
['One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven']
```

In [70]:
```
mylist[0] = 1
mylist[1] = 2
mylist[2] = 3
```

In [71]:
```
mylist
```

Out[71]:
```
[1, 2, 3, 'Four', 'Five', 'Six', 'Seven']
```

In [72]:
```
mylist.clear()
mylist
```

Out[72]:
```
[]
```

In [73]:
```
del mylist
mylist
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[73], line 2
      1 del mylist
----> 2 mylist

NameError: name 'mylist' is not defined
```

In [ ]:

Copy List

In [74]:
```
mylist = ['one','two','three','four','five','six','seven','eight','nine']
```

In [75]:
```
mylist1 = mylist
```

In [76]:
```
id(mylist), id(mylist1)
```

Out[76]:
```
(2306140603904, 2306140603904)
```

In [77]:
```
mylist2 = mylist.copy()
```

In [78]:
```
id(mylist2)
```

Out[78]:
```
2306140759744
```

In [79]:
```
mylist[0] = 1
```

In [80]:
```
mylist
```

Out[80]:
```
[1, 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']
```

In [82]:
```
mylist1
```

Out[82]:
```
[1, 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']
```

In [83]:
```
mylist2
```

Out[83]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']
```

In [ ]:
```

```

Join Lists

In [84]:
```
list1 = ['one','two','three','four']
list2 = ['five','six','seven','eight']
```

In [85]:
```
list3 = list1 + list2
list3
```

Out[85]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

In [86]:
```
list1.extend(list2)
list1
```

Out[86]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

In [ ]:
```

```

List Membership

In [87]:
```
list1
```

Out[87]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

In [88]:
```
'one' in list1
```

Out[88]: True

In [89]:
```
'ten' in list1
```

Out[89]: False

In [90]:
```
if 'three' in list1:
    print('Three is present in the list')
else:
    print('Three is not present in the list')
```

Three is present in the list

In [92]:
```
if'eleven' in list1:
    print('Eleven is present in list1')
else:
    print('Eleven is not present in list')
```

Eleven is not present in list

In [ ]:
```

```

Reverse & Sort List

In [102…
```
list1
```

Out[102… ['eight', 'seven', 'six', 'five', 'four', 'three', 'two', 'one']

In [103…
```
list1.reverse()
```

In [104…
```
list1
```

Out[104… ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

In [105…
```
list1 = list1[::-1]
list1
```

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

In [111…
```
mylist3 = [9,5,2,99,12,88,34]
mylist3.sort()
mylist3
```

Out[111… [2, 5, 9, 12, 34, 88, 99]

In [112…
```
mylist3 = [9,5,2,99,12,88,34]
mylist3.sort(reverse=True)
mylist3
```

Out[112… [99, 88, 34, 12, 9, 5, 2]

In [114…
```
mylist4 = [88,65,33,21,11,98]
sorted(mylist4)
```

Out[114…
```
[11, 21, 33, 65, 88, 98]
```

In [115…
```
mylist4
```

Out[115…
```
[88, 65, 33, 21, 11, 98]
```

In [ ]:

Loop through a list

In [ ]:

In [122…
```
list1 = ['one','two','three','four','five','six','seven','eight','nine']
```

In [123…
```
list1
```

Out[123…
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']
```

In [125…
```
for i in list1:
    print(i)
```

```
one
two
three
four
five
six
seven
eight
nine
```

In [126…
```
for i in enumerate(list1):
    print(i)
```

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

In [ ]:

Count

In [132…
```
list10 = ['one','two','two','four','one','one','seven']
```

In [130…
```
list10.count('one')
```

Out[130… 3

In [133…
```
list10.count('two')
```

Out[133… 2

In [134…
```
list10.count('four')
```

Out[134… 1

In [ ]:

All / Any

In [137…
```
L1 = [1,2,3,4,0]
```

In [138…
```
all(L1)
```

Out[138… False

In [139…
```
any(L1)
```

Out[139… True

In [142…
```
L2 = [1,2,3,4,True,False]
```

In [143…
```
all(L2)
```

Out[143… False

In [144…
```
any(L2)
```

Out[144… True

In [145…
```
L3 = [1,2,3,True]
```

In [146…
```
all(L3)
```

Out[146… True