In [1]:
```
txt = " abc def ghi "
txt.lstrip()
```

Out[1]:
```
'abc def ghi '
```

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

Out[2]:
```
'abc def ghi'
```

In [6]:
```
#Using double quotes in the string is not allowed.
mystr = "My favourite TV Series is \"Game of Thrones\"" # using escape ch
mystr
```

Out[6]:
```
'My favourite TV Series is "Game of Thrones"'
```

In [8]:
```
### List
list1 = []
print (type(list1))
```

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

In [9]:
```
list2 = [10,20,30]
```

In [10]:
```
list3 = [10,77,44,56,66]
```

In [12]:
```
# Farward Indexing
list2[0]
```

Out[12]:
```
10
```

In [15]:
```
list2[-1]
```

Out[15]:
```
30
```

In [17]:
```
mylist = ['one' , 'two' , 'three' , 'four' , 'five' , 'six' , 'seven' , '
```

In [18]:
```
mylist[0:3]
```

Out[18]:
```
['one', 'two', 'three']
```

In [24]:
```
mylist[2:5]
```

Out[24]:
```
['three', 'four', 'five']
```

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

Out[25]:
```
['one', 'two', 'three']
```

In [26]:
```
mylist[-3]
```

Out[26]:
```
'six'
```

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

Out[27]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

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

Out[28]:
```
['seven', 'eight']
```

In [30]:
```
mylist[:]
```

Out[30]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

In [32]:
```
mylist.append('nine')
mylist
```

Out[32]:
```
['one',
 'two',
 'three',
 'four',
 'five',
 'six',
 'seven',
 'eight',
 'nine',
 'nine']
```

In [33]:
```
mylist.insert(9,'ten')
```

In [34]:
```
mylist
```

Out[34]:
```
['one',
 'two',
 'three',
 'four',
 'five',
 'six',
 'seven',
 'eight',
 'nine',
 'ten',
 'nine']
```

In [35]:
```
mylist.remove('nine')
```

In [36]:
```
mylist
```

Out[36]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'ten',
'nine']
```

In [37]:
```
mylist.pop()
mylist
```

Out[37]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'ten']
```

In [41]:
```
mylist.pop(7)
mylist
```

Out[41]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven']
```

In [42]:
```
del mylist[6]
```

In [43]:
```
mylist
```

Out[43]:
```
['one', 'two', 'three', 'four', 'five', 'six']
```

In [44]:
```
del mylist
```

In [45]:
```
mylist
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[45], line 1
----> 1 mylist

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

In [47]:
```
mylist = ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight',
```

In [48]:
```
mylist1 = mylist
```

In [49]:
```
id(mylist) , id(mylist1)
```

Out[49]:
```
(4450417152, 4450417152)
```

In [50]:
```
mylist2 = mylist.copy()
```

In [51]:
```
mylist2
```

Out[51]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']
```

In [52]:
```
list1 = ['one', 'two', 'three', 'four']
list2 = ['five', 'six', 'seven', 'eight']
list3 = list1 + list2 # Join two lists by '+' o
list3
```

Out[52]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

In [53]:
```
list1.extend(list2)
```

In [54]:
```
list1
```

Out[54]:
```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

In [55]:
```
'one' in list1
```

Out[55]:
```
True
```

In [56]:
```
'ten' in list1
```

Out[56]:
```
False
```

In [57]:
```
if 'three' in list1: # Check if 'three' exist in the list
    print('Three is present in the list')
```

```
else:
    print('Three is not present in the list')
```

```
Three is present in the list
```

In [58]:
```
if 'eleven' in list1: # Check if 'three' exist in the list
     print('eleven is present in the list')
else:
     print('eleven is not present in the list')
```

```
eleven is not present in the list
```

In [59]:
```
list1.reverse()
```

In [60]:
```
list1
```

Out[60]:
```
['eight', 'seven', 'six', 'five', 'four', 'three', 'two', 'one']
```

In [61]:
```
mylist3 = [9,5,2,99,12,88,34]
mylist3.sort() # Sort list in ascending order
mylist3
```

Out[61]:
```
[2, 5, 9, 12, 34, 88, 99]
```

In [62]:
```
sorted(mylist3)
```

Out[62]:
```
[2, 5, 9, 12, 34, 88, 99]
```

In [63]:
```
list1
```

Out[63]:
```
['eight', 'seven', 'six', 'five', 'four', 'three', 'two', 'one']
```

In [65]:
```
for i in list1:
    print(i)
```

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

In [66]:
```
for i in enumerate(list1):
    print(i)
```

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

In [67]:
```
# Tuple

tup1 = ()
```

In [68]:
```
tup2 = (10,30,10)
```

In [69]:
```
tup2[0]
```

Out[69]:
```
10
```

In [72]:
```
tup2[-1]
```

Out[72]:
```
10
```

In [82]:
```
# Tuple Slicing

mytuple = ('one', 'two', "three', 'four", 'five', 'six', 'seven' , 'eight
```

In [74]:
```
mytuple[1:5]
```

Out[74]:
```
('two', "three', 'four", 'five', 'six')
```

In [75]:
```
mytuple[-2:]
```

Out[75]:
```
('seven', 'eight')
```

In [76]:
```
mytuple[:]
```

Out[76]:
```
('one', 'two', "three', 'four", 'five', 'six', 'seven', 'eight')
```

In [77]:
```
del mytuple[0]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[77], line 1
----> 1 del mytuple[0]

TypeError: 'tuple' object doesn't support item deletion
```

In [78]:
```
mytuple[0]= 'ten'
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[78], line 1
----> 1 mytuple[0]= 'ten'

TypeError: 'tuple' object does not support item assignment
```

In [81]:
```
del mytuple
```

In [83]:
```
mytuple
```

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

In [85]:
```
for i in mytuple:
    print(type(i))
    print (i)
```

```
<class 'str'>
one
<class 'str'>
two
<class 'str'>
three', 'four
<class 'str'>
five
<class 'str'>
six
<class 'str'>
seven
<class 'str'>
eight
```

In [87]:
```
for i in enumerate(mytuple):
    print(i)
```

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

In [89]:
```
mytuple
'one' in mytuple
```

Out[89]: True

In [90]:
```
'ten' in mytuple
```

Out[90]: False

In [92]:
```
if 'eleven' in mytuple: # Check if 'eleven' exist in the list
  print( 'eleven is present in the tuple')
else:
 print ('eleven is not present in the tuple')
```

```
eleven is not present in the tuple
```

In [93]:
```
mytuple.index('one')
```

Out[93]: 0

In [95]:
```
mytuple.index('two')
```

Out[95]: 1

In [96]:
```
mytuple
```

Out[96]: ('one', 'two', "three', 'four", 'five', 'six', 'seven', 'eight')

In [97]:
```
mytuple.index('eight')
```

Out[97]: 6

In [ ]: