pythonBasicday2

July 21, 2023

[1]:
```
l = [1,123,"arnob" , 'A',34.33]
l
```

[1]:
```
[1, 123, 'arnob', 'A', 34.33]
```

[3]:
```
l2= 2
l+l2
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In [3], line 2
      1 l2= 2
----> 2 l+l2

TypeError: can only concatenate list (not "int") to list
```

[4]:
```
type(l)
```

[4]:
```
list
```

[8]:
```
type(l2)
```

[8]:
```
int
```

[11]:
```
l
```

[11]:
```
[1, 123, 'arnob', 'A', 34.33]
```

[18]:
```
s = "pwskills"
```

[19]:
```
list(s)
```

[19]:
```
['p', 'w', 's', 'k', 'i', 'l', 'l', 's']
```

[26]:
```
l2 = [1,123,"pwskills" , 12.56]
l2[2][1:3:1]
```

[26]:
```
'ws'
```

[27]:
```
l+5
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In [27], line 1
----> 1 l+5

TypeError: can only concatenate list (not "int") to list
```

[28]:
```
l+12
```

[28]:
```
[1, 123, 'arnob', 'A', 34.33, 1, 123, 'pwskills', 12.56]
```

[48]:
```
l = [1,2,3]
l*3
```

[48]:
```
[1, 2, 3, 1, 2, 3, 1, 2, 3]
```

[49]:
```
l.append(6)
```

[50]:
```
l
```

[50]:
```
[1, 2, 3, 6]
```

[51]:
```
l
```

[51]:
```
[1, 2, 3, 6]
```

[52]:
```
l = [1,2,3]
s = "pwskills"
l.append(s)
```

[53]:
```
l
```

[53]:
```
[1, 2, 3, 'pwskills']
```

[55]:
```
l1 = [1, 2, 3, " Arnob "]
l2 = [1,2,3]
l1.append(l2)
l1
```

[55]:
```
[1, 2, 3, ' Arnob ', [1, 2, 3]]
```

[56]:
```
l1
```

[56]: [1, 2, 3, ' Arnob ', [1, 2, 3]]

[58]:
```
l1[4][1:2]
```

[58]: [2]

[81]:
```
l1[4][:-1]
```

[81]: [1, 2]

[82]:
```
l
```

[82]: [1, 2, 3, 'pwskills']

[83]:
```
l2 = 4
l1.append(l2)
```

[85]:
```
l
```

[85]: [1, 2, 3, 'pwskills']

[11]:
```
l = [1,2,3, "pwskills"]
l
```

[11]: [1, 2, 3, 'pwskills']

[12]:
```
s = "arnob"
l.append(s)
l
```

[12]: [1, 2, 3, 'pwskills', 'arnob']

[13]:
```
l.extend(s)
l
```

[13]: [1, 2, 3, 'pwskills', 'arnob', 'a', 'r', 'n', 'o', 'b']

[14]:
```
l[-1]
```

[14]: 'b'

[15]:
```
l
```

[15]: [1, 2, 3, 'pwskills', 'arnob', 'a', 'r', 'n', 'o', 'b']

[17]:
```
s
```

[17]:
```
'arnob'
```

[21]:
```
l = [1,2,3,"pwskills"]
s = [4,5,6]
l.append(s)
l
```

[21]:
```
[1, 2, 3, 'pwskills', [4, 5, 6]]
```

[22]:
```
l[4][1]
```

[22]:
```
5
```

[37]:
```
l = [1,2,3]
l.insert(1,"arnob")#1.index then 2.value
l
```

[37]:
```
[1, 'arnob', 2, 3]
```

[38]:
```
l.insert(2,"My queen")
l
```

[38]:
```
[1, 'arnob', 'My queen', 2, 3]
```

[39]:
```
l.insert(-1,[10,44])
l
```

[39]:
```
[1, 'arnob', 'My queen', 2, [10, 44], 3]
```

[40]:
```
l
```

[40]:
```
[1, 'arnob', 'My queen', 2, [10, 44], 3]
```

[56]:
```
l= [1, 'arnob', 'My queen', 2, [10, 44], 3]
l
```

[56]:
```
[1, 'arnob', 'My queen', 2, [10, 44], 3]
```

[57]:
```
l.pop(3)
l
```

[57]:
```
[1, 'arnob', 'My queen', [10, 44], 3]
```

[64]:
```
l = [1, "arnob", "My queen", [10, 44],3]
l
```

[64]:
```
[1, 'arnob', 'My queen', [10, 44], 3]
```

[65]:
```
l.remove(3)
l
```

[65]: [1, 'arnob', 'My queen', [10, 44]]

[66]:
```
l[3].remove(44)
l
```

[66]: [1, 'arnob', 'My queen', [10]]

[67]:
```
l[1].remove(a)##string cannot be menipulated
```

```
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
Cell In [67], line 1
----> 1 l[1].remove(a)

AttributeError: 'str' object has no attribute 'remove'
```

[72]:
```
l[::-1]##temporary reverse
```

[72]: [[10], 'My queen', 'arnob', 1]

[73]:
```
l
```

[73]: [1, 'arnob', 'My queen', [10]]

[74]:
```
l.reverse()##permanent reverse
l
```

[74]: [[10], 'My queen', 'arnob', 1]

[75]:
```
l
```

[75]: [[10], 'My queen', 'arnob', 1]

[76]:
```
l
```

[76]: [[10], 'My queen', 'arnob', 1]

[79]:
```
l = [[10], 'My queen', 'arnob', 1]
l
```

[79]: [[10], 'My queen', 'arnob', 1]

[82]:
```
l = l[::-1]##permanent reverse by assingning a new variable
l
```

[82]:
```
[1, 'arnob', 'My queen', [10]]
```

[83]:
```
l
```

[83]:
```
[1, 'arnob', 'My queen', [10]]
```

[84]:
```
l.sort()
l
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In [84], line 1
----> 1 l.sort()
      2 l

TypeError: '<' not supported between instances of 'str' and 'int'
```

[86]:
```
l = [1,2,3,4,10,9,8,7]
l.sort()
l
```

[86]:
```
[1, 2, 3, 4, 7, 8, 9, 10]
```

[88]:
```
l = ["arnob","my queen","dada", "pwskills"]
l.sort()
l
```

[88]:
```
['arnob', 'dada', 'my queen', 'pwskills']
```

[90]:
```
l.sort(reverse = True)
l
```

[90]:
```
['pwskills', 'my queen', 'dada', 'arnob']
```

[91]:
```
l.index("arnob")
```

[91]:
```
3
```

[94]:
```
l.count("arnob")
```

[94]:
```
1
```

[95]:
```
l = [1,2,3,]
l
```

[95]:
```
[1, 2, 3]
```

[97]:
```
l[0] = 'a'
l
```

[97]:
```
['a', 2, 3]
```

[98]:
```
l[2]= 4
l
```

[98]:
```
['a', 2, 4]
```

[99]:
```
s = "Arnob"
s
```

[99]:
```
'Arnob'
```

[100]:
```
s[0]
```

[100]:
```
'A'
```

[101]:
```
s[0]='s'
s
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In [101], line 1
----> 1 s[0]='s'
      2 s

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

[103]:
```
s
```

[103]:
```
'Arnob'
```

[106]:
```
s.replace('A','S')#temporary replacement
```

[106]:
```
'Srnob'
```

[107]:
```
s
```

[107]:
```
'Arnob'
```

[1]:
```
t = ([1,2,3], 2,3,4 , "Arnob" , (4+5j))
t
```

[1]:
```
([1, 2, 3], 2, 3, 4, 'Arnob', (4+5j))
```

[2]:
```
type(t)
```

[2]:
```
tuple
```

[3]:
```
t[::-1]
```

[3]:
```
((4+5j), 'Arnob', 4, 3, 2, [1, 2, 3])
```

[12]:
```
l = ["Arnob","My queen", "pwskills"]
l
```

[12]:
```
['Arnob', 'My queen', 'pwskills']
```

[13]:
```
l[2] = 2345
l
```

[13]:
```
['Arnob', 'My queen', 2345]
```

[14]:
```
t = ("Arnob","My queen", "pwskills")
t[2] = 22345#not possible in tuple
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In [14], line 2
      1 t = ("Arnob","My queen", "pwskills")
----> 2 t[2] = 22345

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

[15]:
```
s1 = {}
type(s1)
```

[15]:
```
dict
```

[16]:
```
s2 ={1,2,3,4}
type(s2)
```

[16]:
```
set
```

[17]:
```
s3 = {1,2,3,[5,6,8],"arnob",5+7j}
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In [17], line 1
----> 1 s3 = {1,2,3,[5,6,8],"arnob",5+7j}

TypeError: unhashable type: 'list'
```

[30]:
```
s4 = {1,2,3,4,(2+9j),"arnob", "pwskills"}
s4#set only containcs primitive data type
```

[30]:
```
{(2+9j), 1, 2, 3, 4, 'arnob', 'pwskills'}
```

[27]:
```

```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In [27], line 1
----> 1 s4[::-1]

TypeError: 'set' object is not subscriptable
```

[31]:
```
s4= {1,1,1,1,2,2,2,2,3,3,3,3,5,5,5,5}
s4#set only indentifies unique element
```

[31]:
```
{1, 2, 3, 5}
```

[33]:
```
s4 = [1,2,2,2,2,3,3,3,"arnob","my queen"]
s4
```

[33]:
```
{1, 2, 3, 'arnob', 'my queen'}
```

[34]:
```
set(s4)
```

[34]:
```
{1, 2, 3, 'arnob', 'my queen'}
```

[37]:
```
list(set(s4))
s4
```

[37]:
```
[1, 2, 3, 'my queen', 'arnob']
```

[38]:
```
s5 = {1,2,2,3,3,33,3,33,5,5,5,4,4,4}
s5
```

[38]:
```
{1, 2, 3, 4, 5, 33}
```

[41]:
```
s5.add(6)
s5
```

[41]:
```
{1, 2, 3, 4, 5, 6, 33}
```

[52]:
```
s5= {1,2,3,4,5,33}
s5
```

[52]:
```
{1, 2, 3, 4, 5, 33}
```

[53]:
```
s5.remove(4)
s5
```

[53]:
```
{1, 2, 3, 5, 33}
```

[ ]:
```

```