__PYTHON DATA STRUCTURE__

- USER WILL DEFINE THE VALUE MORE THAN ONE
- LIST
- TUPLE
- SET
- DICT

In [4]:
```
l = []
l
```

Out[4]: []

In [6]:
```
len(l)
```

Out[6]: 0

In [8]:
```
l.append(10)
l
```

Out[8]: [10]

In [12]:
```
len(l)
```

Out[12]: 1

In [15]:
```
l
```

Out[15]: [10]

In [19]:
```
l.append(20)
l.append(30)
l.append(40)
l.append(40)
l
```

Out[19]: [10, 20, 30, 40, 40]

In [21]:
```
len(l)
```

Out[21]: 5

In [23]:
```
l
```

Out[23]: [10, 20, 30, 40, 40]

In [25]:
```
id(l)
```

Out[25]: 1875318141056

In [27]:
```
print(type(l))
```

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

In [33]:
```
a=2+3j
type(a)
```

Out[33]:
```
complex
```

In [35]:
```
import keyword
keyword.kwlist
```

Out[35]:
```
['False',
 'None',
 'True',
 'and',
 'as',
 'assert',
 'async',
 'await',
 'break',
 'class',
 'continue',
 'def',
 'del',
 'elif',
 'else',
 'except',
 'finally',
 'for',
 'from',
 'global',
 'if',
 'import',
 'in',
 'is',
 'lambda',
 'nonlocal',
 'not',
 'or',
 'pass',
 'raise',
 'return',
 'try',
 'while',
 'with',
 'yield']
```

In [39]:
```
len(keyword.kwlist)
```

Out[39]:
```
35
```

In [41]:
```
l  #duplicate number is allowed
```

Out[41]:
```
[10, 20, 30, 40, 40]
```

In [43]:
```
l[:]
```

Out[43]:
```
[10, 20, 30, 40, 40]
```

In [47]:
```
l
```

Out[47]: [10, 20, 30, 40, 40]

In [49]:
```
l[2]
```

Out[49]: 30

In [51]:
```
l[4]
```

Out[51]: 40

__COPY__

In [53]:
```
l1=l.copy()
l1
```

Out[53]: [10, 20, 30, 40, 40]

In [55]:
```
l==l1
```

Out[55]: True

In [61]:
```
print(len(l1))
print(len(l))
```

```
5
5
```

In [63]:
```
l1
```

Out[63]: [10, 20, 30, 40, 40]

In [65]:
```
l1.append(2.3)
l1.append(True)
l1.append(1+2j)
```

In [67]:
```
l1
```

Out[67]: [10, 20, 30, 40, 40, 2.3, True, (1+2j)]

In [69]:
```
l1.append(50)
```

In [71]:
```
l1
```

Out[71]: [10, 20, 30, 40, 40, 2.3, True, (1+2j), 50]

In [73]:
```
l
```

Out[73]: [10, 20, 30, 40, 40]

__COUNT__

In [75]:
```
l.count(10)
```

Out[75]: 1

In [77]:
```
l.count(40)
```

Out[77]: 2

In [79]:
```
l.count(80)
```

Out[79]: 0

In [81]:
```
l
```

Out[81]: [10, 20, 30, 40, 40]

In [83]:
```
l1
```

Out[83]: [10, 20, 30, 40, 40, 2.3, True, (1+2j), 50]

__COPY__

In [87]:
```
l2=l1.copy()
```

In [89]:
```
l2
```

Out[89]: [10, 20, 30, 40, 40, 2.3, True, (1+2j), 50]

__REMOVE__

In [91]:
```
l2.remove(True)
```

In [93]:
```
l2
```

Out[93]: [10, 20, 30, 40, 40, 2.3, (1+2j), 50]

In [99]:
```
l2.remove(1+2j)
```

In [101…
```
l2
```

Out[101… [10, 20, 30, 40, 40, 2.3, 50]

In [107…
```
l2.clear()
```

In [109…
```
l2
```

Out[109… []

In [111…
```
l1
```

Out[111… [10, 20, 30, 40, 40, 2.3, True, (1+2j), 50]

In [113…
```
l2
```

Out[113… []

__DELETE__

In [ ]:
```
del l2
```

In [9]:
```
l2
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[9], line 1
----> 1 l2

NameError: name 'l2' is not defined
```

In [11]:
```
l1
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[11], line 1
----> 1 l1

NameError: name 'l1' is not defined
```

In [ ]:
```

```