

Data structure-user will define the value more than one

- list
- tuple
- set
- dict

```
In [2]: l = []  
l
```

```
Out[2]: []
```

```
In [4]: len(l)
```

```
Out[4]: 0
```

```
In [5]: l.append(10)
```

```
In [6]: l
```

```
Out[6]: [10]
```

```
In [11]: len(l)
```

```
Out[11]: 1
```

```
In [12]: l
```

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

```
In [13]: l.append(20)  
l.append(30)  
l.append(40)  
l.append(40)
```

```
In [14]: l
```

```
Out[14]: [10, 20, 30, 40, 40]
```

```
In [16]: len(l)
```

```
Out[16]: 5
```

```
In [17]: l
```

```
Out[17]: [10, 20, 30, 40, 40]
```

```
In [18]: id(l)
```

```
Out[18]: 1274215313280
```

```
In [19]: print(type(l))
```

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

```
In [20]: a = True  
         type(a)
```

```
Out[20]: bool
```

```
In [21]: import keyword  
         keyword.kwlist
```

```
Out[21]: ['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 [22]: len(keyword.kwlist)
```

Out[22]: 35

In [23]: 1

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

In [24]: 1[:]

Out[24]: [10, 20, 30, 40, 40]

In [25]: 1[0]

Out[25]: 10

In [26]: 1[1]

Out[26]: 20

In [27]: 1[-4]

Out[27]: 20

In [28]: 1

Out[28]: [10, 20, 30, 40, 40]

In [30]: l1=l.copy()
l1

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

In [31]: l==l1

Out[31]: True

In [33]: print (len(l))
print(len(l1))

5
5

In [34]: l1

Out[34]: [10, 20, 30, 40, 40]

In [37]: l1.append(2.3)
l1.append(True)
l1.append(1+2j)

In [38]: l1

Out[38]: [10, 20, 30, 40, 40, 2.3, True, 2.3, True, (1+2j)]

```
In [39]: l1.append(50)
l1
```

Out[39]: [10, 20, 30, 40, 40, 2.3, True, 2.3, True, (1+2j), 50]

```
In [40]: l
```

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

```
In [41]: l.count(10)
```

Out[41]: 1

```
In [42]: l.count(40)
```

Out[42]: 2

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

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

```
In [44]: l.count(100)
```

Out[44]: 0

```
In [45]: l
```

Out[45]: [10, 20, 30, 40, 40]

```
In [52]: l1
```

Out[52]: [10, 20, 30, 40, 40, 2.3, True, 2.3, True, (1+2j), 50]

```
In [53]: l2 = l1.copy()
```

```
In [54]: l2
```

Out[54]: [10, 20, 30, 40, 40, 2.3, True, 2.3, True, (1+2j), 50]

```
In [55]: l2.remove(True)
```

```
In [56]: l2
```

Out[56]: [10, 20, 30, 40, 40, 2.3, 2.3, True, (1+2j), 50]

```
In [57]: l2.clear()
```

```
In [58]: l2
```

Out[58]: []

In [59]: `del 12`

In [60]: `12`

```
-----  
NameError                                Traceback (most recent call last)  
Cell In[60], line 1  
----> 1 12  
  
NameError: name '12' is not defined
```

In [61]: `11`

Out[61]: [10, 20, 30, 40, 40, 2.3, True, 2.3, True, (1+2j), 50]

In [66]: `11.`

```
Cell In[66], line 1  
11.  
  ^  
SyntaxError: invalid syntax
```

In []: