# DATA Structure Remaining Completed

In [1]:
```python
l=[]
```

In [3]:
```python
l.append(10)
l.append(20)
l.append(30)
l.append(40)
l.append(50)
l.append(60)
l.append(70)
l.append(80)
l.append(90)
l.append(10)
```

In [4]:
```python
l
```

Out[4]:  [10, 10, 10, 10, 20, 30, 40, 50, 60, 70, 80, 90, 10]

In [5]:
```python
l1=[]
```

In [6]:
```python
l1
```

Out[6]:  []

In [13]:
```python
l1.append(10)
l1.append(20)
l1.append(30)
l1.append(40)
l1.append(50)
l1.append(60)
l1.append(2.3)
l1.append('nit')
l1.append((1+2j))
l1.append([1,2,3])
```

In [10]:
```python
l1
```

Out[10]:  [10, 20, 30, 40, 50, 60, 2.3, (1+2j), [1, 2, 3]]

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

Out[11]:  [10, 20, 30, 40, 50, 60, 2.3, (1+2j), [1, 2, 3]]

In [12]:
```python
l1
```

Out[12]:  [10, 20, 30, 40, 50, 60, 2.3, (1+2j), [1, 2, 3]]

In [14]:
```python
l1
```

Out[14]:    [10,
            20,
            30,
            40,
            50,
            60,
            2.3,
            (1+2j),
            [1, 2, 3],
            10,
            20,
            30,
            40,
            50,
            60,
            2.3,
            'nit',
            (1+2j),
            [1, 2, 3]]

In [15]:    l1

Out[15]:    [10,
            20,
            30,
            40,
            50,
            60,
            2.3,
            (1+2j),
            [1, 2, 3],
            10,
            20,
            30,
            40,
            50,
            60,
            2.3,
            'nit',
            (1+2j),
            [1, 2, 3]]

In [16]:    l1.count(10)

Out[16]:    2

In [17]:    l1.remove(10)

In [18]:    l1

Out[18]:  [20,
           30,
           40,
           50,
           60,
           2.3,
           (1+2j),
           [1, 2, 3],
           10,
           20,
           30,
           40,
           50,
           60,
           2.3,
           'nit',
           (1+2j),
           [1, 2, 3]]

In [19]:  `l1.remove(2.3)`

In [20]:  `l1`

Out[20]:  [20,
           30,
           40,
           50,
           60,
           (1+2j),
           [1, 2, 3],
           10,
           20,
           30,
           40,
           50,
           60,
           2.3,
           'nit',
           (1+2j),
           [1, 2, 3]]

In [21]:  `l1.insert(2,35)`

          l1

In [22]:  `l1`

```
Out[22]:  [20,
           30,
           35,
           40,
           50,
           60,
           (1+2j),
           [1, 2, 3],
           10,
           20,
           30,
           40,
           50,
           60,
           2.3,
           'nit',
           (1+2j),
           [1, 2, 3]]
```

```
In [23]:  l1.insert(2,35)
```

```
In [24]:  l1
```

```
Out[24]:  [20,
           30,
           35,
           35,
           40,
           50,
           60,
           (1+2j),
           [1, 2, 3],
           10,
           20,
           30,
           40,
           50,
           60,
           2.3,
           'nit',
           (1+2j),
           [1, 2, 3]]
```

```
In [25]:  l1.pop()
```

```
Out[25]:  [1, 2, 3]
```

```
In [26]:  l1
```

Out[26]:  [20,
           30,
           35,
           35,
           40,
           50,
           60,
           (1+2j),
           [1, 2, 3],
           10,
           20,
           30,
           40,
           50,
           60,
           2.3,
           'nit',
           (1+2j)]

In [27]:  ```python
l1.remove(30)
```

           l1

In [28]:  ```python
l1
```

Out[28]:  [20,
           35,
           35,
           40,
           50,
           60,
           (1+2j),
           [1, 2, 3],
           10,
           20,
           30,
           40,
           50,
           60,
           2.3,
           'nit',
           (1+2j)]

In [29]:  ```python
l.pop(30)
```

           ---------------------------------------------------------------------------
           IndexError                                Traceback (most recent call last)
           Cell In[29], line 1
           ----> 1 l.pop(30)

           IndexError: pop index out of range

In [30]:  ```python
l1.pop(30)
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
Cell In[30], line 1
----> 1 l1.pop(30)

IndexError: pop index out of range
```

In [31]: `l1.pop(1)`

Out[31]: `35`

l1

In [32]: `l1`

Out[32]: 
```
[20,
 35,
 40,
 50,
 60,
 (1+2j),
 [1, 2, 3],
 10,
 20,
 30,
 40,
 50,
 60,
 2.3,
 'nit',
 (1+2j)]
```

In [35]: `l3=[]`

l3

In [36]: `l3`

Out[36]: `[]`

In [37]: `l3.append(10)`

In [38]: `l3`

Out[38]: `[10]`

In [39]: `l3.extend(l1)`

In [40]: `l3`

Out[40]:  [10,
           20,
           35,
           40,
           50,
           60,
           (1+2j),
           [1, 2, 3],
           10,
           20,
           30,
           40,
           50,
           60,
           2.3,
           'nit',
           (1+2j)]

In [41]:  `l1.reverse()`

In [42]:  `l1`

Out[42]:  [(1+2j),
           'nit',
           2.3,
           60,
           50,
           40,
           30,
           20,
           10,
           [1, 2, 3],
           (1+2j),
           60,
           50,
           40,
           35,
           20]

In [43]:  `l10=[5,2,8,10,12]`

          l10

In [44]:  `l10`

Out[44]:  [5, 2, 8, 10, 12]

In [45]:  `l10.sort()`

In [46]:  `l10`

Out[46]:  [2, 5, 8, 10, 12]

In [47]:  `l10.sort(reverse=True)`

In [48]:  `l10`

Out[48]:  [12, 10, 8, 5, 2]

In [ ]: