LIST

```
In [ ]:
```

```
In [3]: l=[]
         l
```

```
Out[3]: []
```

```
In [4]: l1=list()
         l1
```

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

```
In [5]: type(l)
```

```
Out[5]: list
```

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

```
Out[6]: 0
```

```
In [7]: type(l1)
```

```
Out[7]: list
```

```
In [9]: l.append(10)
         l
```

```
Out[9]: [10, 10]
```

```
In [10]: len(l)
```

```
Out[10]: 2
```

```
In [11]: l.pop()
```

```
Out[11]: 10
```

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

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

```
In [13]: l.append(20)
          l.append(30)
          l.append(40)
          l.append(50)
```

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

```
Out[14]: [10, 20, 30, 40, 50]
```

```
In [15]: len(l)
```

```
Out[15]:   5

In [16]:   l1

Out[16]:   []

In [17]:   l1.append(2.3)
           l1.append(True)
           l1.append('15')
           l1.append(1+2j)

In [18]:   l1

Out[18]:   [2.3, True, '15', (1+2j)]

In [19]:   l

Out[19]:   [10, 20, 30, 40, 50]

In [20]:   l1.append(2.3)

In [21]:   l1

Out[21]:   [2.3, True, '15', (1+2j), 2.3]

In [22]:   l

Out[22]:   [10, 20, 30, 40, 50]

In [23]:   l2=l1.copy()

In [24]:   l2

Out[24]:   [2.3, True, '15', (1+2j), 2.3]

In [25]:   l2.append(15)

In [26]:   l2

Out[26]:   [2.3, True, '15', (1+2j), 2.3, 15]

In [28]:   l1==l2

Out[28]:   True

In [29]:   l1

Out[29]:   [2.3, True, '15', (1+2j), 2.3, 15]

In [30]:   l==l2

Out[30]:   False

In [31]:   l
```

```
Out[31]:    [10, 20, 30, 40, 50]

In [32]:    l1

Out[32]:    [2.3, True, '15', (1+2j), 2.3, 15]

In [33]:    l2

Out[33]:    [2.3, True, '15', (1+2j), 2.3, 15]

In [34]:    l2.clear()

In [35]:    l2

Out[35]:    []

In [37]:    len(l2)

Out[37]:    0

In [38]:    l2.append(10)
            l2.append(4.9)
            l2.append('Hello')
            l2.append(2+5j)

In [39]:    l2

Out[39]:    [10, 4.9, 'Hello', (2+5j)]

In [40]:    print(l)
            print(l1)
            print(l2)

            [10, 20, 30, 40, 50]
            [10, 4.9, 'Hello', (2+5j)]
            [10, 4.9, 'Hello', (2+5j)]

In [41]:    l

Out[41]:    [10, 20, 30, 40, 50]

In [42]:    l[:]

Out[42]:    [10, 20, 30, 40, 50]

In [44]:    l[3]

Out[44]:    40

In [45]:    l

Out[45]:    [10, 20, 30, 40, 50]

In [46]:    l[10]
```

```
-------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
Cell In[46], line 1
----> 1 l[10]

IndexError: list index out of range
```

In [47]: `l1`

Out[47]: `[10, 4.9, 'Hello', (2+5j)]`

In [48]: `l1[2:]`

Out[48]: `['Hello', (2+5j)]`

In [49]: `l1`

Out[49]: `[10, 4.9, 'Hello', (2+5j)]`

In [50]: `l1[:4]`

Out[50]: `[10, 4.9, 'Hello', (2+5j)]`

In [51]: `l2`

Out[51]: `[10, 4.9, 'Hello', (2+5j)]`

In [52]: `l2[0:10]`

Out[52]: `[10, 4.9, 'Hello', (2+5j)]`

In [53]: `l2[0:3]`

Out[53]: `[10, 4.9, 'Hello']`

In [54]: `l2`

Out[54]: `[10, 4.9, 'Hello', (2+5j)]`

In [55]: `l2[:-2]`

Out[55]: `[10, 4.9]`

In [56]: `l2`

Out[56]: `[10, 4.9, 'Hello', (2+5j)]`

In [57]: `l2[-4:]`

Out[57]: `[10, 4.9, 'Hello', (2+5j)]`

In [58]: `l`

Out[58]: `[10, 20, 30, 40, 50]`

```
In [59]:  l[:-1]

Out[59]:  [10, 20, 30, 40]

In [60]:  l

Out[60]:  [10, 20, 30, 40, 50]

In [61]:  l[-4:]

Out[61]:  [20, 30, 40, 50]

In [62]:  l2

Out[62]:  [10, 4.9, 'Hello', (2+5j)]

In [63]:  l2[::-1]

Out[63]:  [(2+5j), 'Hello', 4.9, 10]

In [64]:  l2[::-2]

Out[64]:  [(2+5j), 4.9]

In [65]:  l2[::2]

Out[65]:  [10, 'Hello']

In [66]:  l2

Out[66]:  [10, 4.9, 'Hello', (2+5j)]

In [67]:  l

Out[67]:  [10, 20, 30, 40, 50]

In [68]:  l[::-3]

Out[68]:  [50, 20]

In [69]:  l1

Out[69]:  [10, 4.9, 'Hello', (2+5j)]

In [70]:  l1.count(10)

Out[70]:  1

In [71]:  l1.append(10)

In [72]:  l1.count(10)

Out[72]:  2

In [73]:  l1.count(25)
```

```
Out[73]:  0

In [74]:  l1

Out[74]:  [10, 4.9, 'Hello', (2+5j), 10]

In [75]:  l1.index(10)

Out[75]:  0

In [77]:  l1.index('Hello')

Out[77]:  2

In [78]:  l1

Out[78]:  [10, 4.9, 'Hello', (2+5j), 10]

In [79]:  l1.remove(10)

In [80]:  l1.pop()

Out[80]:  10

In [81]:  l1

Out[81]:  [4.9, 'Hello', (2+5j)]

In [82]:  l

Out[82]:  [10, 20, 30, 40, 50]

In [83]:  l2

Out[83]:  [4.9, 'Hello', (2+5j)]

In [84]:  l

Out[84]:  [10, 20, 30, 40, 50]

In [85]:  l.append([8,10,15])

In [86]:  l

Out[86]:  [10, 20, 30, 40, 50, [8, 10, 15]]

In [87]:  for i in l:
              print(i)

          10
          20
          30
          40
          50
          [8, 10, 15]
```

In [ ]: