

5th string list slicing(data type)

```
In [1]: print(l)
        print(l1)
        print(l2)
```

```
-----
NameError                                Traceback (most recent call last)
Cell In[1], line 1
----> 1 print(l)
      2 print(l1)
      3 print(l2)

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

```
In [ ]: s1='nit'
        s1
```

```
In [ ]: s1[0]
```

```
In [ ]: s1[1]
```

```
In [ ]: s1[2]
```

```
In [ ]: s1
```

```
In [ ]: for i in s1:
        print(i)
```

```
In [ ]: s1
```

list slicing

```
In [8]: l=[10,20,30,35,40,3,10,15,20,30,40,2.3,1]
        l
```

```
Out[8]: [10, 20, 30, 35, 40, 3, 10, 15, 20, 30, 40, 2.3, 1]
```

```
In [9]: l[:]
```

```
Out[9]: [10, 20, 30, 35, 40, 3, 10, 15, 20, 30, 40, 2.3, 1]
```

```
In [10]: l[0:8]
```

```
Out[10]: [10, 20, 30, 35, 40, 3, 10, 15]
```

```
In [11]: l[3:]
```

```
Out[11]: [35, 40, 3, 10, 15, 20, 30, 40, 2.3, 1]
```

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

```
Out[12]: [10, 20, 30, 35, 40, 3, 10, 15, 20, 30, 40, 2.3, 1]
```

```
In [13]: l[:7]
```

```
Out[13]: [10, 20, 30, 35, 40, 3, 10]
```

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

```
Out[14]: [10, 20, 30, 35, 40, 3, 10, 15, 20, 30, 40, 2.3, 1]
```

```
In [15]: l[0:20:5]
```

```
Out[15]: [10, 3, 40]
```

```
In [16]: l[3:10:3]
```

```
Out[16]: [35, 10, 30]
```

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

```
Out[17]: [10, 20, 30, 35, 40, 3, 10, 15, 20, 30, 40, 2.3, 1]
```

```
In [25]: l[::-1]
```

```
Out[25]: [1, 2.3, 40, 30, 20, 15, 10, 3, 40, 35, 30, 20, 10]
```

```
In [29]: l
```

```
Out[29]: [10, 20, 30, 35, 40, 3, 10, 15, 20, 30, 40, 2.3, 1]
```

```
In [31]: l[::-2]
```

```
Out[31]: [1, 40, 20, 10, 40, 30, 10]
```

```
In [33]: l
```

```
Out[33]: [10, 20, 30, 35, 40, 3, 10, 15, 20, 30, 40, 2.3, 1]
```

```
In [36]: l[::-3]
```

```
Out[36]: [1, 30, 10, 35, 10]
```

```
In [38]: l1=[40,30,20,15,10,2.3,1]  
l1
```

```
Out[38]: [40, 30, 20, 15, 10, 2.3, 1]
```

```
In [40]: l1
```

```
Out[40]: [40, 30, 20, 15, 10, 2.3, 1]
```

```
In [42]: l1[-1]='nit'
```

```
In [44]: l1
```

Out[44]: [40, 30, 20, 15, 10, 2.3, 'nit']

In [46]: l1

Out[46]: [40, 30, 20, 15, 10, 2.3, 'nit']

In [48]: l1[-1][0] *#nested slicing*
l1

Out[48]: [40, 30, 20, 15, 10, 2.3, 'nit']

In [50]: print(l1[-1][0])
print(l1[-1][1])
print(l1[-1][2])

n
i
t

In [52]: l1

Out[52]: [40, 30, 20, 15, 10, 2.3, 'nit']

In [54]: l2 = [10, 15, 20, 30, 40, 2.3, 1]
l2

Out[54]: [10, 15, 20, 30, 40, 2.3, 1]

In [56]: len(l2)

Out[56]: 7

In [58]: l3 = [100, 4, 3]
l3

Out[58]: [100, 4, 3]

In [60]: l4 = l2 + l3 *#list membership*

In [62]: l4

Out[62]: [10, 15, 20, 30, 40, 2.3, 1, 100, 4, 3]

In [64]: 20 in l4

Out[64]: True

enumerate

In [67]: l1

Out[67]: [40, 30, 20, 15, 10, 2.3, 'nit']

In [69]: for i in l1:

```
print(i)
```

```
40  
30  
20  
15  
10  
2.3  
nit
```

```
In [71]: for i in enumerate(l1):  
        print(i)
```

```
(0, 40)  
(1, 30)  
(2, 20)  
(3, 15)  
(4, 10)  
(5, 2.3)  
(6, 'nit')
```

```
In [73]: l1
```

```
Out[73]: [40, 30, 20, 15, 10, 2.3, 'nit']
```

```
In [75]: l3
```

```
Out[75]: [100, 4, 3]
```

```
In [77]: any(l3)
```

```
Out[77]: True
```

```
In [79]: l3.append(0)  
l3
```

```
Out[79]: [100, 4, 3, 0]
```

```
In [81]: all(l3)
```

```
Out[81]: False
```

```
In [83]: any(l3)
```

```
Out[83]: True
```

```
In [ ]:
```

```
In [ ]:
```

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In [ ]:
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In [ ]:
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In [ ]:
```

```
In [ ]:
```

