In [3]:

```python
num=[10,20,30,'30']
type(num)
```

Out[3]:

list

In [6]:

```python
#enumerate

num = [1,2,3]
for i in num:
    print(i,end='')
```

123

In [8]:

```python
for i in enumerate(num):
    print(i)
```

```
(0, 1)
(1, 2)
(2, 3)
```

In [23]:

```python
str1 = 'abc'
str2 = 'abcda'
```

In [17]:

```python
str1 in str2
```

Out[17]:

True

In [18]:

```python
str1 is str2
```

Out[18]:

False

In [19]:

```python
id(str1[0])
```

Out[19]:

140230414309808

In [21]:

```python
1  id(str2[0])
```

Out[21]:

140230414309808

In [25]:

```python
1  id(str2[4])
```

Out[25]:

140230414309808

In [34]:

```python
1  list1 = ['a','b']
2  list1[0] = 'p'
3  list1
```

Out[34]:

['p', 'b']

In [44]:

```python
1  list2 = ['10','2'] * 5
2  list2[0:2]
```

Out[44]:

['10', '2']

In [64]:

```python
1  animals = ['Zebra','Lion','Elephant','Tiger']
2
3  len(animals)
4  # print(animals[0],end=' ')
5  # print(animals[1],end=' ')
6  # print(animals[2],end=' ')
7  # print(animals[3],end=' ')
8
9  #while loop
10
11 # i = 0
12 # while(i<len(animals)):
13 #     print(animals[i],end=' ')
14 #     i+=1
15
16 #for loop
17
18 for i in animals[1:3]:
19     print(i)
```

```
Lion
Elephant
```

In [ ]:

```
1
```

In [65]:

```
1  for a, b in enumerate(animals[1:3]):
2      print(b,a)
3
```

```
Lion 0
Elephant 1
```

In [5]:

```
1  list1 = [1,2,3]
2  list2 = [10,20,30]
3
4  list1 + list2 + [2,3,4,4.4,'str']
```

Out[5]:

```
[1, 2, 3, 10, 20, 30, 2, 3, 4, 4.4, 'str']
```

In [4]:

```
1  list1 = ['a','b']
2  list2 = list1 + ['p']
3  print(list2)
```

```
['a', 'b', 'p']
```