

In [4]:

```
#PYTHON format()
name="Anju"
age=28
txt="My name is {},age is {}"
print(txt.format(name,age))
```

My name is Anju,age is 28

In [5]:

```
name="Anju"
age=28
txt="My name is {1},age is {0}"
print(txt.format(name,age))
```

My name is 28,age is Anju

In [8]:

```
#input method
x=int(input("enter a numner:"))
print(x)
```

enter a numner:3

3

list

In [9]:

```
#collection datatype
list1=['a','b','c']
list2=[1,2,3]
list3=[True,False]
list4=['a',1,True]
print(list1)
```

['a', 'b', 'c']

In [10]:

```
print(len(list1))
```

3

In [12]:

```
print(list1[0])
print(list2[2])
```

a

3

In [13]:

```
print(list1[-1])
```

c

In [14]:

```
print(list1[0:2])
```

['a', 'b']

In [15]:

```
list5=[1,2,3,4,1]  
print(list5)
```

[1, 2, 3, 4, 1]

In [16]:

```
#List changeable  
list1[0]='A'
```

In [17]:

```
print(list1)
```

['A', 'b', 'c']

In [18]:

```
list1[1:]=['B','C']  
print(list1)
```

['A', 'B', 'C']

In [19]:

```
#to add items  
  
list6=list1+list2  
print(list6)
```

['A', 'B', 'C', 1, 2, 3]

In [20]:

```
list1
```

Out[20]:

['A', 'B', 'C']

In [21]:

```
list1.append('D')  
print(list1)
```

['A', 'B', 'C', 'D']

In [22]:

```
list1.extend(list2)
print(list1)
```

```
['A', 'B', 'C', 'D', 1, 2, 3]
```

In [23]:

```
#remove
```

```
list1.remove('D')
print(list1)
```

```
['A', 'B', 'C', 1, 2, 3]
```

In [24]:

```
list1.pop(0)
print(list1)
```

```
['B', 'C', 1, 2, 3]
```

In [25]:

```
list1.pop()
print(list1)
```

```
['B', 'C', 1, 2]
```

In [26]:

```
del list1[0]
print(list1)
```

```
['C', 1, 2]
```

In [27]:

```
list1.insert(0, 'B')
print(list1)
```

```
['B', 'C', 1, 2]
```

In [28]:

```
list1.clear()
print(list1)
```

```
[]
```

In [29]:

```
del list1
```

In [30]:

```
print(list1)
```

-
NameError Traceback (most recent call last)

~\AppData\Local\Temp\ipykernel_6984\1424600876.py in <module>

----> 1 print(list1)

NameError: name 'list1' is not defined

In [31]:

```
list1=list(('a','b','c'))  
print(list1)
```

['a', 'b', 'c']

tuple

In [32]:

```
a=('a','b',1,2)  
print(a)
```

('a', 'b', 1, 2)

In [33]:

```
print(type(a))
```

<class 'tuple'>

In [35]:

```
b=('b',)  
print(type(b))
```

<class 'tuple'>

In [36]:

```
print(len(a))
```

4

In [37]:

```
print(a[1])
```

b

In [38]:

```
a
```

Out[38]:

```
('a', 'b', 1, 2)
```

In [39]:

```
c=list(a)
```

In [40]:

```
c
```

Out[40]:

```
['a', 'b', 1, 2]
```

In [41]:

```
c[0]='A'  
c
```

Out[41]:

```
['A', 'b', 1, 2]
```

In [42]:

```
a=tuple(c)  
a
```

Out[42]:

```
('A', 'b', 1, 2)
```

In [43]:

```
print(type(a))
```

```
<class 'tuple'>
```

In [44]:

```
a+b
```

Out[44]:

```
('A', 'b', 1, 2, 'b')
```

In []:

