

Python-Day 2

```
In [1]: ###TUPLE  
t=(4,5,6,7)
```

```
In [2]: type(t)
```

```
Out[2]: tuple
```

```
In [3]: a=()
```

```
In [4]: type(a)
```

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

```
In [5]: a=()  
b=[]  
c={}
```

```
In [6]: type(a)
```

```
Out[6]: tuple
```

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

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

```
In [8]: type(c)
```

```
Out[8]: dict
```

```
In [9]: test=(3,4,5,6,6,7)
```

```
In [10]: print(test)
```

```
(3, 4, 5, 6, 6, 7)
```

```
In [11]: #Only Two Functions are available for Tuple in Python.  
test.count(6)
```

```
Out[11]: 2
```

```
In [12]: test.index(5)
```

```
Out[12]: 2
```

```
In [13]: test.index(7)
```

```
Out[13]: 5
```

```
In [ ]: ###Tuple has no append and extend.They are immutable.You cant change the value.
```

```
In [14]: t1=(3,4,5,6) ###Concatenation is allowed.  
t2=(2,3,4,1)  
t1+t2
```

```
Out[14]: (3, 4, 5, 6, 2, 3, 4, 1)
```

```
In [15]: t3=("Aishwarya",23,"Data",11.0)  
t3
```

```
Out[15]: ('Aishwarya', 23, 'Data', 11.0)
```

```
In [16]: a="India" #strings are immutable i.e.you cannot change value in position.
```

```
In [18]: t1=(3,4,5,6)  
len(t1)
```

```
Out[18]: 4
```

```
In [19]: list(range(len(t1)))
```

```
Out[19]: [0, 1, 2, 3]
```

```
In [20]: for i in range(len(t1)):  
        print(t1[i])
```

```
3  
4  
5  
6
```

```
In [21]: for i in t1:  
        print(i)
```

```
3  
4  
5  
6
```

```
In [ ]: ###SET
```

```
In [23]: empty={}
```

```
In [24]: type(empty)
```

```
Out[24]: dict
```

```
In [28]: set_demo={"Aishwarya","Anand",22,"Aishwarya"}
```

```
In [29]: set_demo
```

```
Out[29]: {22, 'Aishwarya', 'Anand'}
```

```
In [27]: ###SET will contain unique elements,no duplicates.
```

```
In [ ]: ###IF we want Duplicates,insertion,deletion,etc,then go for the List.
```

```
In [ ]: ###If you dont want any changes,data to be constant,then go for Tuple.
```

```
In [ ]: ###SET object is not subscriptable,you cannot access elements.
```

```
In [30]: len(set_demo) #all distinct elements
```

```
Out[30]: 3
```

```
In [31]: #Then how do you access?  
for i in set_demo:  
    print(i)
```

```
Anand  
Aishwarya  
22
```

```
In [41]: set={22,144,12,"##","Anand","Aishwarya","***","@@@","$","%", "^",1234.789,"__"}
```

```
In [42]: set
```

```
Out[42]: {'##',
          '$',
          '%',
          '***',
          12,
          1234.789,
          144,
          22,
          '@@@',
          'Aishwarya',
          'Anand',
          '^',
          '___'}
```

```
In [38]: for i in set:
          print(i)
```

```
12
MSC
144
22
##
Aishwarya
```

```
In [43]: list_items=["Banana","Apple",23.45,"Papaya"]
```

```
In [44]: list_items
```

```
Out[44]: ['Banana', 'Apple', 23.45, 'Papaya']
```

```
In [49]: set.pop() #deleting
```

```
Out[49]: 12
```

```
In [52]: set.pop(1)
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-52-3dd54251a69e> in <module>
----> 1 set.pop(1)

TypeError: pop() takes no arguments (1 given)
```

```
In [56]: ###Dictionary
          dict={"Jan":31,"Name":"Aishwarya"}
```

```
In [57]: type(dict)
```

```
Out[57]: dict
```

```
In [ ]: ###key can be string,numbers or tuple.They cannot be List.They are immutable.
```

```
In [ ]: ###dict() is an inbuilt function,but the values must be passes as tuple.
```

```
In [61]: a=dict([("A",1),("B",2)])
```

```
-----  
TypeError                                Traceback (most recent call last)  
<ipython-input-61-b0f4083b6d2a> in <module>  
----> 1 a=dict([("A",1),("B",2)])  
  
TypeError: 'dict' object is not callable
```

```
In [60]: a
```

```
Out[60]: 'India'
```

```
In [ ]: dict={"Jan":1,"Feb":2,"March":3}
```

```
In [1]: a=4536  
        b=4536  
        a is b
```

```
Out[1]: False
```

```
In [2]: d=dict([('A',1),('B',1)])  
        d
```

```
Out[2]: {'A': 1, 'B': 1}
```

```
In [ ]:
```