

```
In [3]: 1 # t =() or tuple()
        2 t=(12,"ap",12.54)
        3 t
```

Out[3]: (12, 'ap', 12.54)

```
In [4]: 1 t[0]
```

Out[4]: 12

```
In [5]: 1 len(t)
```

Out[5]: 3

```
In [6]: 1 t[0]=23
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-6-6bfb1052ae19> in <module>
----> 1 t[0]=23
```

TypeError: 'tuple' object does not support item assignment

Tuple is immutable

```
In [ ]: 1 dir(t)
```

```
In [ ]: 1 t.count(12)
```

```
In [ ]: 1 t.index('ap')
```

we can store tuple in a list

Type *Markdown* and LaTeX: α^2

Dictionaries:

```
In [ ]: 1 myList=[]
        2 print(type(myList))
```

```
In [ ]: 1 myList=(1,2,3)
        2 print(type(myList))
```

```
In [ ]: 1 myList=(1)
        2 print(type(myList))
```

```
In [ ]: 1 myList=()
        2 print(type(myList))
```

```
In [ ]: 1 words={"name":"srav","branch":"IT"}
        2 print(words,type(words))
```

```
In [ ]: 1 #To read values in a dictionary
        2
        3 print(words['name'])
```

```
In [ ]: 1 #To update the value in a dictionary:
        2 print(words)
        3 words['name'] = 'sravs'
        4 print(words)
```

```
In [ ]: 1 words = {'name':'Akhil','branch':'IT','name':'sravs'}
        2 print(words)
```

```
In [ ]: 1 words = {'name':['Akhil','Aneesha'],'branch':'IT'}
        2 print(words)
```

```
In [ ]: 1 print(words['name'])
```

```
In [ ]: 1 print(words['name'][1])
```

```
In [ ]: 1 print(words['branch'][1])
```

```
In [ ]: 1 words={'name':'Akhil','branch':'IT'}
        2 print(words)
```

```
In [ ]: 1 for each in words:
        2     print(each,'---->',words[each])
```

Methods in Dictionary

```
In [ ]: 1 words = {'name':'sravya','branch':'IT'}
```

dict.clear():

```
In [ ]: 1 words.clear()
        2 print(words)
```

```
In [ ]: 1 words = {'name':'sravya','branch':'IT'}
```

```
In [ ]: 1 dict={}
        2
```

```
In [ ]: 1 dict.clear()
```

dict.copy():

```
In [ ]: 1 newWords=words.copy()  
2 print(newWords)
```

dict.get(key):

```
In [ ]: 1 words.get('name')
```

```
In [ ]: 1 print(words.get('mobile'))
```

```
In [ ]: 1 print(words['mobile'])  
2 print('hai')
```

```
In [ ]: 1 print(words.get('mobile'))  
2 print('hai')
```

```
In [ ]: 1 #{'orange':2, 'mango':2, 'apple':3}  
2 fruits = ['orange', 'apple', 'mango', 'avacado', 'pear', 'apple', 'mango', 'apple',  
3 fruits_dict= {}  
4 for fruit in fruits:  
5     fruits_dict[fruit]=fruits_dict.get(fruit,0)+1  
6  
7 print(fruits_dict)
```

```
In [ ]: 1 fruits = ['orange', 'apple', 'mango', 'avacado', 'pear', 'apple', 'mango', 'apple',  
2 fruits_dict= {}  
3 for fruit in fruits:  
4     fruits_dict[fruit]=fruits.count(fruit)  
5  
6 print(fruits_dict)
```

```
In [ ]: 1 len(fruits_dict)
```

```
In [ ]: 1 for key in fruits_dict.keys():  
2     print(fruits_dict[key])
```

```
In [ ]: 1 for key in fruits_dict.keys():  
2     print(fruits_dict.get(key))
```

```
In [7]: 1 for key in fruits_dict.keys():
        2     print(key, fruits_dict.get(key), sep=": ")
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-7-62675d402250> in <module>
----> 1 for key in fruits_dict.keys():
      2     print(key, fruits_dict.get(key), sep=": ")

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

```
In [ ]: 1 fruits_dict.values()
```

```
In [ ]: 1 for value in fruits_dict.values():
        2     print(value, end=" ")
        3
```

```
In [ ]: 1 fruits_dict.items()
        2
```

```
In [ ]: 1 for item in fruits_dict.items():
        2     print(*item, sep=": ")
```

```
In [ ]: 1 #Another way
        2 for k,v in fruits_dict.items():
        3     print(k,v, sep=": ")
        4
```

```
In [ ]: 1 fruits_dict.get("Apple", 6)
```

```
In [ ]: 1 fruits_dict
```

dict.setdefault():

```
In [ ]: 1 fruits_dict.setdefault("Apple", 6)
```

```
In [ ]: 1 fruits_dict.setdefault('Apple', 0)
```

```
In [8]: 1 fruits_dict
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-8-6573adbfe71c> in <module>
----> 1 fruits_dict

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

In []:

1	
---	--