Python dictionary is an unordered collection of items. While other compound data types have only value as an element, a dictionary has key/value pairs. Dictionaries are optimized to retrieve values when the key is known.

In [5]:
```
dict = {'rahul':28,'geetha':25,'shalini':26}
print(dict)
```

```
{'rahul': 28, 'geetha': 25, 'shalini': 26}
```

In [1]:
```
def list(items):
    num = 0
    for x in items:
         num += x
    return  num
print(list([1,2,-8]))
```

```
-5
```

In [6]:
```
n = 4
l = {}
for i in range(n):
    print(l)
```

```
{}
{}
{}
{}
```

In [2]:
```
num = {'apple','mango','orange','pineapple'}
print(list(num)[0])
```

```
apple
```

In [6]:
```
d = {'Red': 1, 'Green': 2, 'Blue': 3}
for color_key, value in d.items():
    print(d)
```

```
{'Red': 1, 'Green': 2, 'Blue': 3}
{'Red': 1, 'Green': 2, 'Blue': 3}
{'Red': 1, 'Green': 2, 'Blue': 3}
```

In [9]:
```
lst = {'pys':74,'chem':82,'maths':89}
print(sum(lst.values()))
```

```
245
```

In [14]:
```
dic1={1:10,2:20}
dic2={3:30,4:40}
dic3={5:50,6:60}
dic4={}
for d in dic1,dic2,dic3:
    dic4.update(d)
print(dic4)
```

```
{1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}
```

In [17]:
```
tuple = (1,2,3,)
print(tuple)
```

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

In [18]:
```
tuple = ("hi",3,3.14)
print(tuple)
```

```
('hi', 3, 3.14)
```

In [19]:
```
tup = ('g','i','t','a','m')
str =  ''.join(tup)
print(str)
```

```
gitam
```

In [23]:
```
tuple = ("gitam")
print(tuple[2:])
print(tuple[0:2:4])
```

```
tam
g
```

In [25]:
```
tuple = (1,2.3,4)
print(len(tuple))
```

```
3
```

In [26]:
```
tuplex = ((2, "w"),(3, "r"))
print(dict(tuplex))
```

```
{2: 'w', 3: 'r'}
```

In [1]:
```
x = ("gitam")
y = reversed(x)
print(tuple(y))
```

```
('m', 'a', 't', 'i', 'g')
```

In [2]:
```
l = [("x", 1), ("x", 2), ("x", 3), ("y", 1), ("y", 2), ("z", 1)]
d = {}
for a, b in l:
    d.setdefault(a, []).append(b)
print (d)
```

```
{'x': [1, 2, 3], 'y': [1, 2], 'z': [1]}
```

In [3]:
```
lst1 = (3,4,6,7)
lst2 = tuple(lst1)
print(lst2)
```

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

In [ ]:
```

```