Dictionaries in Python

```
In [1]:   x={'Name': ['Amit','Sumit','Ramit'],'Score':[12,14,18],'Roll':[123,321,411]} # Creating
```

```
In [2]:   x
```

```
Out[2]:  {'Name': ['Amit', 'Sumit', 'Ramit'],
          'Score': [12, 14, 18],
          'Roll': [123, 321, 411]}
```

```
In [3]:   for i in range(len(x)):
              print(x.get('Name')[i])
              print(x.get('Score')[i])
              print(x.get('Roll')[i])
              print('\n')
```

```
Amit
12
123


Sumit
14
321


Ramit
18
411
```

```
In [4]:   len(x)
```

```
Out[4]:  3
```

```
In [5]:   x.values
```

```
Out[5]:  <function dict.values>
```

```
In [6]:   x.values()
```

```
Out[6]:  dict_values([['Amit', 'Sumit', 'Ramit'], [12, 14, 18], [123, 321, 411]])
```

```
In [7]:   x.popitem()
```

```
Out[7]:  ('Roll', [123, 321, 411])
```

```
In [8]:   x.keys()
```

Out[8]: `dict_keys(['Name', 'Score'])`

In [9]:
```python
x.popitem()
```

Out[9]: `('Score', [12, 14, 18])`

In [10]:
```python
x
```

Out[10]: `{'Name': ['Amit', 'Sumit', 'Ramit']}`

In [11]:
```python
x.pop('Name')
```

Out[11]: `['Amit', 'Sumit', 'Ramit']`

In [12]:
```python
x
```

Out[12]: `{}`

In [13]:
```python
x.values()
```

Out[13]: `dict_values([])`

In [14]:
```python
x['Name']=['Amit','Sumit','Ramit'] # Update List via Assignment Operator
```

In [15]:
```python
x
```

Out[15]: `{'Name': ['Amit', 'Sumit', 'Ramit']}`

In [16]:
```python
x.update({'Rank':[4,6,1]}) # Update List
```

In [17]:
```python
x
```

Out[17]: `{'Name': ['Amit', 'Sumit', 'Ramit'], 'Rank': [4, 6, 1]}`

In [18]:
```python
x.values() # Print Dictionary Values
```

Out[18]: `dict_values([['Amit', 'Sumit', 'Ramit'], [4, 6, 1]])`

In [19]:
```python
x.keys() # Printing List Keys
```

Out[19]: `dict_keys(['Name', 'Rank'])`

In [20]:
```python
x.items() # Printing List Items
```

Out[20]: dict_items([('Name', ['Amit', 'Sumit', 'Ramit']), ('Rank', [4, 6, 1])])

In [21]:
```python
# List for Dictionary Keys
y=[]
for y in x:
    y=x.keys()
print(y)
```

dict_keys(['Name', 'Rank'])

In [22]:
```python
# List for Dictionary Values
z=[]
for y in x:
    z=x.values()
print(z)
```

dict_values([['Amit', 'Sumit', 'Ramit'], [4, 6, 1]])

In [23]:
```python
z
```

Out[23]: dict_values([['Amit', 'Sumit', 'Ramit'], [4, 6, 1]])

In [24]:
```python
x.values()  # Print Values of Dictionaries
```

Out[24]: dict_values([['Amit', 'Sumit', 'Ramit'], [4, 6, 1]])

In [25]:
```python
x={x:x^2 for x in range(6)} # Dictionary Comprehension
```

In [26]:
```python
x
```

Out[26]: {0: 2, 1: 3, 2: 0, 3: 1, 4: 6, 5: 7}