```
# pop method
d = {"Venky": 100, "Viky": 200, "Sendhil": 300, "Mani": 400}
d.pop()
     TypeError
                                              Traceback (most recent call last)
     <ipython-input-1-00c355f1d2f6> in <cell line: 5>()
           3 d = {"Venky": 100, "Viky": 200, "Sendhil": 300, "Mani": 400}
          4
     ----> 5 d.pop()
     TypeError: pop expected at least 1 argument, got 0
v = d.pop("Sendhil")
print(v)
print(type(v))
print(d)
→ 300
     <class 'int'>
     {'Venky': 100, 'Viky': 200, 'Mani': 400}
print(d)
{'Venky': 100, 'Viky': 200, 'Mani': 400}
d.pop("Virat")
                                             Traceback (most recent call last)
     <ipython-input-4-db9b048476c0> in <cell line: 1>()
     ----> 1 d.pop("Virat")
     KeyError: 'Virat'
v = d.pop("Virat", 10)
print(v)
print(d)
→ 10
     {'Venky': 100, 'Viky': 200, 'Mani': 400}
v = d.pop("Venky", 10)
print(v)
print(d)
→ 100
     {'Viky': 200, 'Mani': 400}
# popitem()
d = {"Venky": 100, "Viky": 200, "Sendhil": 300, "Mani": 400}
v = d.popitem() # returns a tuple of last key_value pair
print(v)
print(type(v))
print(d)
                                                                           McAfee | WebAdvisor
→ ('Mani', 400)
     <class 'tuple'>
     {'Venky': 100, 'Viky': 200, 'Sendhil': 300}
```

## Applications of List, Tuple, Sets, Frozen Sets & Dictionary:

```
# see notes
# Immutable dictionary (NOT FOR GATE)
from immutabledict import immutabledict
d = immutabledict({"a":10, "b": 12})
print(d)
print(type(d))
→ immutabledict({'a': 10, 'b': 12})
     <class 'immutabledict.immutabledict'>
d['a']
→ 10
d['a'] = 100
                                              Traceback (most recent call last)
     <ipython-input-16-11d6b5ab638e> in <cell line: 1>()
     ----> 1 d['a'] = 100
          2 d
     TypeError: 'immutabledict' object does not support item assignment
```



