exercise 1: Below are the two lists convert it into the dictionary

keys = ['Ten', 'Twenty', 'Thirty']

values = [10, 20, 30]

Expected output: {'Ten': 10, 'Twenty': 20, 'Thirty': 30}

In [4]:

```
keys = ['Ten', 'Twenty', 'Thirty']
values = [10, 20, 30]
t1 = zip(keys,values)
Dict1 = dict(t1)
print(Dict1)
```

```
{'Ten': 10, 'Twenty': 20, 'Thirty': 30}
```

exercise 2: Merge following two Python dictionaries into one

dict1 = {'Ten': 10, 'Twenty': 20, 'Thirty': 30}

dict2 = {'Thirty': 30, 'Fourty': 40, 'Fifty': 50}

Expected output: {'Ten': 10, 'Twenty': 20, 'Thirty': 30, 'Fourty': 40, 'Fifty': 50}

In [8]:

```
dict1 = {'Ten': 10, 'Twenty': 20, 'Thirty': 30}

dict2 = {'Thirty': 30, 'Fourty': 40, 'Fifty': 50}

dict1.update(dict2)
print(dict1)
```

```
{'Ten': 10, 'Twenty': 20, 'Thirty': 30, 'Fourty': 40, 'Fifty': 50}
```

exercise 3: Access the value of key ‘history’

sampleDict = { "class":{ "student":{ "name":"Mike", "marks":{ "physics":70, "history":80 } } } }

Expected output:

80

In [27]:

```
sampleDict = { "class":{ "student":{ "name":"Mike", "marks":{ "physics":70, "history":80 }
print(sampleDict["class"]["student"]["marks"]["history"])
```

```
80
```

exercise 4: Initialize dictionary with default values

Given:

employees = ['Kelly', 'Emma', 'John']

defaults = {"designation": 'Application Developer', "salary": 8000}

In [39]:

```
employees = ['Kelly', 'Emma', 'John']

defaults = {"designation": 'Application Developer', "salary": 8000}
employeeDict = dict.fromkeys(employees,defaults)
print(employeeDict)
```

```
{'Kelly': {'designation': 'Application Developer', 'salary': 8000}, 'Emma':
{'designation': 'Application Developer', 'salary': 8000}, 'John': {'designat
ion': 'Application Developer', 'salary': 8000}}
```

exercise 5: Create a new dictionary by extracting the following keys from a given dictionary

Given dictionary:

sampleDict = { "name": "Kelly", "age":25, "salary": 8000, "city": "New york"

}

Keys to extract

keys = ["name", "salary"]

Expected output:

{'name': 'Kelly', 'salary': 8000}

In [54]:

```
keys = ["name", "salary"]
sampleDict = { "name": "Kelly", "age":25, "salary": 8000, "city": "New york"}
dft = {}
srf="name"
i=0
for key in keys:
    dft.update({keys[i]:sampleDict[key]})
    i=i+1

print(dft)
```

```
{'name': 'Kelly', 'salary': 8000}
```

exercise 7: Check if a value 200 exists in a dictionary

sampleDict = {'a': 100, 'b': 200, 'c': 300}

Expected output:

True

In [64]:

```
sampleDict = {'a': 100, 'b': 200, 'c': 300}
200 in sampleDict.values()
```

Out[64]:

```
True
```

exercise 8: Rename key city to location in the following dictionary

sampleDict = { "name": "Kelly", "age":25, "salary": 8000, "city": "New york" }

Expected output:

{ "name": "Kelly", "age":25, "salary": 8000, "location": "New york" }

In [71]:

```
sampleDict = { "name": "Kelly", "age":25, "salary": 8000, "city": "New york" }
sampleDict["location"]=sampleDict.pop("city")
print(sampleDict)
```

```
{'name': 'Kelly', 'age': 25, 'salary': 8000, 'city': 'New york', 'location':
'New york'}
```

exercise 10: Given a Python dictionary, Change Brad’s salary to 8500

sampleDict = { 'emp1': {'name': 'Jhon', 'salary': 7500}, 'emp2': {'name': 'Emma', 'salary': 8000}, 'emp3': {'name': 'Brad', 'salary': 6500} }

Expected output:

sampleDict = { 'emp1': {'name': 'Jhon', 'salary': 7500}, 'emp2': {'name': 'Emma', 'salary': 8000}, 'emp3': {'name': 'Brad', 'salary': 8500} }

In [83]:

```
sampleDict = { 'emp1': {'name': 'Jhon', 'salary': 7500}, 'emp2': {'name': 'Emma', 'salary':
sampleDict["emp3"]["salary"]=8500
print(sampleDict)
```

```
{'emp1': {'name': 'Jhon', 'salary': 7500}, 'emp2': {'name': 'Emma', 'salar
y': 8000}, 'emp3': {'name': 'Brad', 'salary': 8500}}
```