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In [1]: #dictionary a changeable, unordered collection of unique key:value and its fast because of hashing
capitals = {'KSA':'Riyadh',
            'UAE':'Abu Dhabi',
            'KWT':'Kueait',
            'EGY':'Cairo'
            }
print(capitals)

{'KSA': 'Riyadh', 'UAE': 'Abu Dhabi', 'KWT': 'Kueait', 'EGY': 'Cairo'}
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In [2]: #there is no index instead we use the key
print(capitals['KSA'])

Riyadh
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In [3]: print(capitals['KSa'])

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KeyError                                Traceback (most recent call last)
<ipython-input-3-8ff9295f182c> in <module>
----> 1 print(capitals['KSa'])

KeyError: 'KSa'
```

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In [4]: #the key must be the same
print(capitals['KSA'])
print(capitals['UAE'])
print(capitals['KWT'])
print(capitals['EGY'])

Riyadh
Abu Dhabi
Kueait
Cairo
```

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In [5]: #the get func
print(capitals.get('KSA'))

Riyadh
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In [6]: #the keys func that print all the keys in the dictionary
print(capitals.keys())

dict_keys(['KSA', 'UAE', 'KWT', 'EGY'])
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In [7]: #the values func
print(capitals.values())

dict_values(['Riyadh', 'Abu Dhabi', 'Kueait', 'Cairo'])
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In [10]: #print all element in dictionary
for key,value in capitals.items():
    print(key,value)

KSA Riyadh
UAE Abu Dhabi
KWT Kueait
EGY Cairo
```

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In [11]: #the update func
capitals.update({'QAT':'Doha'})
print(capitals)

{'KSA': 'Riyadh', 'UAE': 'Abu Dhabi', 'KWT': 'Kueait', 'EGY': 'Cairo', 'QAT': 'Doha'}
```

```
In [13]: capitals.update({'KSA':'Diriyah'})
print(capitals)

{'KSA': 'Diriyah', 'UAE': 'Abu Dhabi', 'KWT': 'Kueait', 'EGY': 'Cairo', 'QAT': 'Doha'}
```

```
In [15]: #the pop func
capitals.pop('KWT')
print(capitals)

{'KSA': 'Diriyah', 'UAE': 'Abu Dhabi', 'EGY': 'Cairo', 'QAT': 'Doha'}
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In [16]: #the clear func
capitals.clear()
print(capitals)

{}
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In [ ]:
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