

Python 102

August 6, 2018

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In [19]: #Dictionary
         # A dictionary in python holds key value pairs (hash maps or associative arrays) thes
         # unique identifier and the value is the data. So start of creating a dictionary

         student={'name': 'gordon', 'age': 29, 'courses': ['EDA', 'R', 'Python']}
         student

Out[19]: {'age': 29, 'courses': ['EDA', 'R', 'Python'], 'name': 'gordon'}

In [20]: #lets access the values
         student['name']

Out[20]: 'gordon'

In [21]: student['courses']

Out[21]: ['EDA', 'R', 'Python']

In [22]: #add data to disctionaries
         student['phone']='555-5555'
         student

Out[22]: {'age': 29,
         'courses': ['EDA', 'R', 'Python'],
         'name': 'gordon',
         'phone': '555-5555'}

In [23]: #what about updating
         student['name']='thewis3fool'
         student

Out[23]: {'age': 29,
         'courses': ['EDA', 'R', 'Python'],
         'name': 'thewis3fool',
         'phone': '555-5555'}

In [24]: #we can use update() method to update and add into dictionaries
         student.update({'name': 'gordon', 'age': '28', 'email': 'gordon.py@jupyter.com'})
         student
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Out[24]: {'age': '28',
          'courses': ['EDA', 'R', 'Python'],
          'email': 'gordon.py@jupyter.com',
          'name': 'gordon',
          'phone': '555-5555'}

In [25]: #now lets remove values from the dictionary
del student['age']
student

Out[25]: {'courses': ['EDA', 'R', 'Python'],
          'email': 'gordon.py@jupyter.com',
          'name': 'gordon',
          'phone': '555-5555'}

In [26]: student.pop('email')
student

Out[26]: {'courses': ['EDA', 'R', 'Python'], 'name': 'gordon', 'phone': '555-5555'}

In [27]: # Know the number of keys in a dictionary
len (student)

Out[27]: 3

In [28]: #print out all the keys
student.keys()

Out[28]: dict_keys(['name', 'courses', 'phone'])

In [29]: # print out the values
student.values()

Out[29]: dict_values(['gordon', ['EDA', 'R', 'Python'], '555-5555'])

In [30]: #now if we wana pring all the elements
student.items()

Out[30]: dict_items([('name', 'gordon'), ('courses', ['EDA', 'R', 'Python']), ('phone', '555-5555')])

In [31]: #looping through dictionary
for i in student:
    print(i)#print all the keys by default

name
courses
phone

In [32]: #loop through key value pairs
for i,j in student.items():
    print(i,j)

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name gordon
courses ['EDA', 'R', 'Python']
phone 555-5555
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In [33]: # Thats all for this chapter!!! May the force be with you!!!
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