6.1创建字典

#key and value

phoneBook={"Bill":1234,"Mike":'2345',"John":3456,"Mary":6789}

print(phoneBook["John"])

6.2将序列转换为字典

items=[['bill','1234'],('mkie','2345'),['john','34567'],['leon','7668']]

print(items)

d=dict(items)

print(d)

dict1=dict(name="bill",num=1234,age=32)

print(dict1)

[['bill', '1234'], ('mkie', '2345'), ['john', '34567'], ['leon', '7668']]

{'bill': '1234', 'mkie': '2345', 'john': '34567', 'leon': '7668'}

{'name': 'bill', 'num': 1234, 'age': 32}

items=[]

while True:

key=input("pls input key:")

if key==":exit":

break

value = input("pls input value:")

keyValue=[key,value]

items.append(keyValue)

dic=dict(items)

print(dic)

6.3字典基本操作

（1）通过len获取字典长度;

#通过len函数获取字典长度

items=[1,2,3,4,5]

print(len(items))

d={"name":"bill","age":32}

print(len(d))

#通过key获取和设置字典的值,设置值若不存在就追加

print(d["name"])

d["name"]="mary"

d["lang"]="english"

print(d)

#查找

print(1 in items)

print("name" in d)

print("location" in d)

'''

小结：

1.key类型，列表只能是数字（索引），字典的key可以是多种类型；

2.自动添加，字典设置超出范围，自动添加；

3.查找成员，列表使用in，直接查找值，字典使用in查找key；

'''

6.4#用format\_map格式化字符串

values1=(1,2,"hello")

str1 = "abc %d xyz,%d,%s world"

print(str1%values1)

values2={'title':"极客起源",'url':"https://geekori.com",'company':"欧瑞科技"}

str2="""

<html>

<head>

<title>{title}</title>

<meta charset="utf-8"/>

</head>

<body>

<h1>{title}</h1>

<a href="{url}">{company}</a>

</body>

"""

print(str2)

print(str2.format\_map(values2))

6.5序列与迭代

'''

1.获取字典中key的列表；

2.获取字典中Key-value对的列表；

3.并行迭代；

4.压缩序列；

5.反转序列迭代；

'''

#定义一个字典

d = {"name":"leon","age":"32","sex":"man","location":"shenzhen"}

for key in d:

print("{} = {}".format(key,d[key]),end=',')

print()

#同时迭代key and value

for key,value in d.items():

print("{} = {}".format(key,value),end=',')

#并行迭代

list1=[1,2,3,4,5,6]

list2=['a','b','c','d','e','f']

for i in range(len(list1)):

print("list1[{}]={},list2[{}]={}".format(i,list1[i],i,list2[i]))

print()

#压缩迭代

for value in zip(list1,list2):

print(value,end=" ")

print()

for value in zip(list2,list1):

print(value,end=" ")

print()

items=[]

for value in zip(list2,list1):

items.append(value)

print(items)

d1=dict(items)

print(d1)

#反转排序迭代

print("=="\*16)

values1=[6,3,9,4,7,4,1,4,3,9,1]

print(sorted(values1))

values2 = reversed(values1)

for v in values2:

print(v,end=' ')

#abcdefg

print()

print( ' '.join(list(reversed('abcdefg'))))

6.6清空字典

name1={"Bill":22,"hello":3,"leon":30}

name2 = name1

name2={}

print(name1)

name1.clear()

print(name2)

6.7copy和deepcopy方法

person1={"name":"Bill","age":30,"fullName":["Bill","Gates"]}

person2 = person1.copy() #"fullName"列表，使用同一个块

person1["age"]=18

person1["fullName"][1]="Clinton"

print("person2",person2)

from copy import deepcopy

person3=deepcopy(person1) #不管有几层，完全拷贝，完全独立

person1["fullName"][1] = "Kate"

print("person1",person1)

print("person3",person3)

6.8 fromkeys方法创建字典

newDict1={}.fromkeys(["name","compay"])

print(newDict1)

d2=newDict1.fromkeys(("helo","leon"),"value====")

print(d2)

6.9get方法

dict = {"name":"Bill","age":30}

print(dict["age"])

print(dict.get('salary'))

print(dict.get('name'))

d = {"help":"帮助","bike":"自行车","geek":"极客"}

while True:

word = input("请输入英文单词:")

if word == ":exit":

break

value = d.get(word)

if value == None:

print("{}在字典中不存在.".format(word))

else:

print("'{}'的含义是'{}'".format(word,value))

6.10获取字典中的key,value对，items()和keys方法

d = {"help":"帮助","bike":"自行车","geek":"极客"}

print(d.items())

for key\_value in d.items():

print("key={},value={}".format(key\_value[0],key\_value[1]))

for key,val in d.items():

print("key={},value={}".format(key,val))

print(('bike','自行车') in d.items())

print("==="\*10)

dict\_items = d.items() #d.items()与d指向同一地址

d['bike'] ='摩托车'

print(dict\_items)

print(d.keys())

for key in d.keys():

print(key)

6.11弹出字典中的值（pop()和popitem（））

#pop,popitem

d = {'c':10,'a':40,'b':12,'x':45}

d['1'] = 20

d['5'] = 100

print(d.pop('a'))

print(d)

for i in range(len(d)):

print(d.popitem())

6.12 setdefault()只添加不修改

d={"name":"bill","age":22}

d['salary'] = 2000

d['age'] = 50

print(d.setdefault("location","china"))

print(d.setdefault("location","hk"))

print(d.setdefault("lang"))

print(d)

6.13update()

#update():用一个字典中的key-value更新另一个字典，该方法接受一个参数

#用作数据源的字典

#存在key的值更新，不存在添加

#dict1.update(dict2)

d1={

'title':"欧瑞学院",

'website':'https://geekori.com',

'description':'从事在线IT课程研发和销售'

}

d2={

'title':"ouruikeyi ",

'products':['欧若学院','boke'],

'description':'gognju软件开发'

}

d1.update(d2)

print(d1)

print(d2)

6.14values()获取字典里所有值的列表

d={

'a':1,

'b':2,

'c':3,

'd':4,

'e':5,

'f':4

}

print(d.values())

print(d.keys())

for value in d.values():

print(value)

#keys,values,items

s1 += "{number{}:010}".format(index)###？？？？？？