Dictionary Assignment

1. dic1={'a':5,'b':10,'c':3}

maxval=max(dict1.values())

minval=min(dict1.values())

print("Maximum : ",maxval)

print("Minimum : ",minval)

Output :

Maximum : 10

Minimum : 3

1. n=int(input("Enter no. of students :"))

dict1={}

a=[]

for i in range(1,n+1):

x=input("Enter name :")

y=input("Enter class :")

a=input("Enter subjects :").split()

dict1[x]=[y,a]

print("Data entered :",dict1)

dict2={}

for k,v in dict1.items():

if v not in dict2.items():

dict2[k]=v

print("After deleting duplicate items :",dict2)

Output :

Enter number of students : 3

Enter name : A

Enter class : 8

Enter subjects : Maths

Enter name : B

Enter class : 7

Enter subjects : English

Enter name : C

Enter class : 8

Enter subjects : Maths

Data entered : {'A':[8,'Maths'],'B':[7,'English'],'C':[8,'Maths']}

After deleting duplicate items : {'A':[8,'Maths'],'B':[7,'English']}

1. d1={1:'a',2:'b',3:'c'}

d2={4:'d',5:'e'}

d3={}

for d in (d1,d2):

d3.update(d)

print(d3)

Output :

{1:'a',2:'b',3:'c',4:'d',5:'e'}

1. dic={1:5,2:10,3:20}

m=1

for i in dic:

m=m\*dic[i]

print("Multiplication value :",m)

Output :

Multiplication value : 1000

1. dic={3:'a',1:'b',2:'c'}

for k in sorted(dic):

print(k,dic[k])

Output :

1 b

2 c

3 a

1. dic={i:i\*\*3 for i in range(5)}

print(dic)

if dic:

print("Dictionary is not empty")

else:

print("Dictionary is empty")

Output :

{1:1,2:8,3:27,4:64}

Dictionary is not empty

1. dict1={}

dict2={}

n=int(input("Enter no. of items :"))

for i in range(1,n+1):

x1=int(input("Enter length in m :"))

dict1[x1]=x1\*100

print(dict1)

m=int(input("Enter no. of items :"))

for i in range(1,m+1):

x2=int(input("Enter length in m :"))

dict2[x2]=x2/100

print(dict2)

Output :

Enter no. of items : 3

Enter length in m : 2

Enter length in m : 4

Enter length in m : 5

{2:200,4:400,5:500}

Enter no. of items : 2

Enter length in cm : 150

Enter length in cm : 200

{150:1.5,200:2.0}

1. dic1={1:'a',2:'b',3:'c'}

print("Before inverting :",dic1)

dic2=dict(zip(dic1.values(),dic1.keys()))

print("After inverting :",dic2)

Output :

Before inverting : {1:'a',2:'b',3:'c'}

After inverting : {'a':1,'b':2,'c':3}

Questionnaire :

1. It enhances the readability of code.
2. Dictionary can hold upto larger spaces than list due to hashing process.
3. They are pair of values and so preferable for key-value pair.
4. It's faster than list as it follows a look up algorithm whereas list is iterable.