Série sur les dictionnaires en Python

Responsable du cours : Yousfi Souheib

Exercice 1 :

Write a Python script to sort (ascending and descending) a dictionary by value.

Exercice 2 :

Write a Python script to add a key to a dictionary.

Exercice 3 :

Write a Python script to concatenate following dictionaries to create a new one.
Sample Dictionary : dic1={1 :10, 2 :20} ; dic2={3 :30, 4 :40} ; dic3={5 :50,6 :60}
Expected Result : {1 : 10, 2 : 20, 3 : 30, 4 : 40, 5 : 50, 6 : 60}

Exercice 4 :

Write a Python script to check whether a given key already exists in a dictionary.

Exercise 5 :

Write a Python program to iterate over dictionaries using for loops.
d = {'x' : 10, 'y' : 20, 'z' : 30}
y -> 10
z -> 20
x -> 30

Exercise 6 :

Write a Python script to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are square of keys.
Expected Output : {1 : 1, 2 : 4, 3 : 9, 4 : 16, 5 : 25,...}

Exercise 7 :

Write a Python program to remove a key from a dictionary.

Exercise 8 :

Write a Python program to map two lists into a dictionary.
keys = ['red', 'green', 'blue']
values = ['#FF0000','#008000', '#0000FF']
Expected Output : {'green' : '#008000', 'blue' : '#0000FF', 'red' : '#FF0000'}

Exercise 9 :

Write a Python program to sort a dictionary by key.
dict = {'red' :'#FF0000', 'green' :'#008000', 'black' :'#000000', 'white' :'#FFFFFF'}
Expected Output : {'black' : '#000000', 'green' : '#008000', 'red' : '#FF0000', 'white' : '#FFFFFF'}

Exercise 10 :

studentdata = {'id1' : {'name' : ['Sara'], 'class' : ['V'], 'subject-integration' : ['English, math, science']},'id2' : {'name' : ['David'], 'class' : ['V'], 'subject-integration' : ['English, math, science']}}
Write a Python program to print the 'subject-integration' for the 'id1'.
Write a Python program to print the first subject 'English' for the last result.

Exercise 11 :

Write a Python program to remove duplicates from Dictionary. studentdata = {'id1' : {'name' : ['Sara'], 'class' : ['V'], 'subject-integration' : ['English, math, science']}, 'id2' : {'name' : ['David'], 'class' : ['V'], 'subject-integration' : ['English, math, science']}, 'id3' : {'name' : ['Sara'], 'class' : ['V'], 'subject-integration' : ['English, math, science']}}

Exercise 12 :

Write a Python program to print the dictionary in Ex11 line by line.

Exercise 13 :

Write a Python program to check a dictionary is empty or not.

Exercise 14 :

Write a Python program to combine two dictionary adding values for common keys.
d1 = {'a' : 100, 'b' : 200, 'c' :300}
d2 = {'a' : 300, 'b' : 200, 'd' :400}
Expected Output : Counter({'a' : 400, 'b' : 400, 'd' : 400, 'c' : 300})

Exercise 15 :

Write a Python program to combine values in python list of dictionaries. Sample data : [{'item' : 'Table', 'amount' : 400},{'item' : 'Laptop', 'amount' : 1300}, {'item' : 'Laptop', 'amount' : 750}] Expected Output : Counter({'Laptop' : 2050, 'Table' : 400})

Exercise 16 :

Sample data : [{'id' : 1, 'success' : True, 'name' : 'Med'}, {'id' : 2, 'success' : False, 'name' : 'X'},{'id' : 3, 'success' : True, 'name' : 'Sarra' }]
Write a Python program to count how many dictionaries have success as True.

♣ *Bon travail*