Week 3 (Practice)

Exercise 1 (Python List)

Write a Python program to find the difference between the two lists and outputs as below:
List1 is given [12,8,9,2.5,3.6,7,4.4,14.5]
List2 is given [2.5,3,14.5,12,9]
Output 1: [8,3.6,4.4,7]
Output 2: [3]
Note: (list(set(list1) ? set(list2))) is used

Exercise 2 (Python List)

Write a Python program to find the index of an item in a specified list.

Sample List: List1[10,20,6,-6,-7,12]
Instruction: Find the index of number '-6' in the list.

Note: .index() is used

Exercise 3 (Python List)

Given 3 lists as below, write a python program to find the difference between 3 lists.

List_1 : Winter, Summer, Autumn
List_2: Winter, Spring
List_3: Spring

Expected out: ['Autumn', 'Summer']

Note: List and Set will be used

Answer:

Exercise 4 (Python Dictionary)

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

Sample Dictionary : {0: 10, 1: 20}
Expected Result : {0: 10, 1: 20, 2: 30}

Exercise 5 (Python Dictionary)

Write a Python program to sum all the items in a dictionary.
Sample value of n is 255,65,-126.
Expected output: 193

Exercise 6 (Python Tuple)

Write a Python program to add an item in a tuple.

Sample Data: tuplex = (4, 6, 2, 8, 3, 1)
Instruction:
1) Add number '9' into the tuple.
Expecting Output: (4, 6, 2, 8, 3, 1, 9)

2) Adding items (15,20,25) into the existing tuple:
Expecting output: (4, 6, 2, 8, 3, 15, 20, 25, 4, 6, 2, 8, 3)

3) Converting the tuple to list. Note: add item '30' in the list.
Expecting output: (4, 6, 2, 8, 3, 15, 20, 25, 4, 6, 2, 8, 3, 30)

Exercise 7 (Python List and Tuple)

Write a Python program which accepts a sequence of comma-separated numbers and text from user and generate a list and a tuple with the input.

Exercise 8 (Python Set)

Write a Python program to create a union of sets.

Sample data: setx = set(["green", "blue", "red", "purple", "white"])
                  sety = set(["blue", "yellow","red","pink","black"])

Expecting output: {'red', 'green', 'black', 'white', 'pink', 'purple', 'blue', 'yellow'}