

Assignment Week 1

1. Write a Python script to add a key to a dictionary.
Sample Dictionary: {0: 10, 1: 20}
Expected Result : {0: 10, 1: 20, 2: 30}
2. 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}
3. Write a Python script to generate and print a dictionary that contains a number (between 1 and n) in the form (x, x*x).
Sample Dictionary (n = 5):
Expected Output : {1: 1, 2: 4, 3: 9, 4: 16, 5: 25}
4. Write a Python program to get the maximum and minimum value in a dictionary.
5. Write a Python program to remove duplicates from Dictionary.
6. Write a Python program to combine values in python list of dictionaries.
Sample data: [{ 'item': 'item1', 'amount': 400}, { 'item': 'item2', 'amount': 300}, { 'item': 'item1', 'amount': 750}]
Expected Output: Counter({'item1': 1150, 'item2': 300})
7. Write a Python program to count the values associated with key in a dictionary.
Sample data: = [{ 'id': 1, 'success': True, 'name': 'Lary'}, { 'id': 2, 'success': False, 'name': 'Rabi'}, { 'id': 3, 'success': True, 'name': 'Alex'}]
Expected result: Count of how many dictionaries have success as True
8. Write a Python program to add member(s) in a set.
9. Write a Python program to remove an item from a set if it is present in the set.
10. Write a Python program to create set difference.
11. Write a Python program to create a symmetric difference.
12. Write a Python program to issubset and issuperset.
13. Write a Python program to create a shallow copy of sets.
Note : Shallow copy is a bit-wise copy of an object. A new object is created that has an exact copy of the values in the original object.
14. Write a Python program to use of frozensets.
15. Write a Python program to find maximum and the minimum value in a set.
16. Accept string from a user and display only those characters which are present at an even index number.
For example str = "pynative" so you should display 'p', 'n', 't', 'v'.
17. Return a set of identical items from a given two Python set
set1 = [10, 20, 30, 40, 50]
set2 = [30, 40, 50, 60, 70]
Expected output:
{40, 50, 30}
18. Given two Python sets, update first set with items that exist only in the first set and not in the second set.
set1 = {10, 20, 30}
set2 = {20, 40, 50}
Expected output:
set1 = {10, 30}

19. Write a Python program to count the number of characters (character frequency) in a string.
Sample String : google.com'
Expected Result : {'o': 3, 'g': 2, '.': 1, 'e': 1, 'l': 1, 'm': 1, 'c': 1}
20. Write a Python program to get a string from a given string where all occurrences of its first char have been changed to '\$', except the first char itself.
Sample String : 'restart'
Expected Result : 'resta\$t'
21. Write a Python program to find the first appearance of the substring 'not' and 'poor' from a given string, if 'not' follows the 'poor', replace the whole 'not'...'poor' substring with 'good'. Return the resulting string.
Sample String : 'The lyrics is not that poor!'
'The lyrics is poor!'
Expected Result : 'The lyrics is good!'
'The lyrics is poor!'
22. Write a Python program to change a given string to a new string where the first and last chars have been exchanged.
23. Write a Python program to remove the characters which have odd index values of a given string.