- 1. Write a Python script to sort (ascending and descending) a dictionary by value.
- **2.** 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}

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}

- **4.** Write a Python script to check if a given key already exists in a dictionary.
- **5.** Write a Python program to iterate over dictionaries using for loops.
- **6.** 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}

- **7.** Write a Python script to merge two Python dictionaries.
- 8. Write a Python program to sum all the items in a dictionary.
- 9. Write a Python program to multiply all the items in a dictionary.
- **10.** Write a Python program to remove a key from a dictionary.
- **11.** Write a Python program to sort a dictionary by key.
- **12.** Write a Python program to get the maximum and minimum value in a dictionary.
- **13.** Write a Python program to remove duplicates from Dictionary.

- **14.** Write a Python program to check a dictionary is empty or not.
- **15.** 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} Sample output: Counter({'a': 400, 'b': 400, 'd': 400, 'c': 300})

- **16.** Write a Python program to find the highest 3 values in a dictionary.
- **17.** Write a Python program to match key values in two dictionaries. Sample dictionary: {'key1': 1, 'key2': 3, 'key3': 2}, {'key1': 1, 'key2': 2} Expected output: key1: 1 is present in both x and y
- **18.** Write a Python program to check if all dictionaries in a list are empty or not.

Sample list : [{},{},{}]
Return value : True
Sample list : [{1,2},{},{}]
Return value : False

19. Write a Python program to remove duplicates from a list of lists.

Sample list: [[10, 20], [40], [30, 56, 25], [10, 20], [33], [40]]

New List : [[10, 20], [30, 56, 25], [33], [40]]

20. Write a Python program to extend a list without append.

Sample data: [10, 20, 30]

[40, 50, 60]

Expected output: [40, 50, 60, 10, 20, 30]