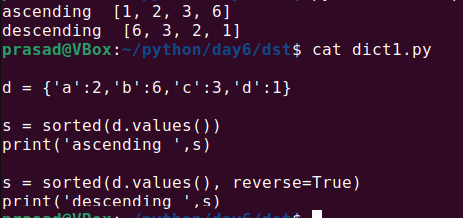
DICTIONARY PRACTICE

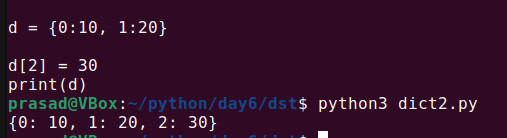
1. Write a Python script to sort (ascending and descending) a dictionary by value.



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 the following dictionaries to create a new one.

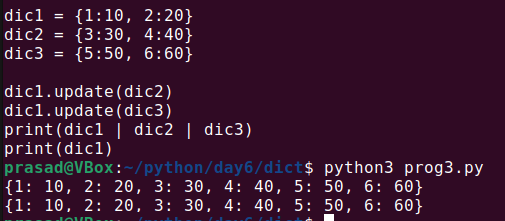
Sample Dictionary :

dic1={1:10, 2:20}

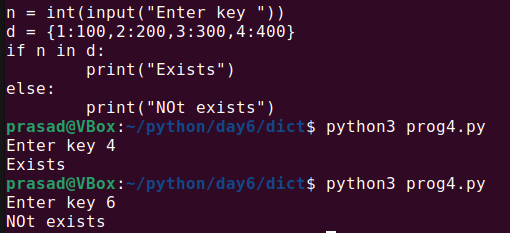
dic2={3:30, 4:40}

dic3={5:50,6:60}

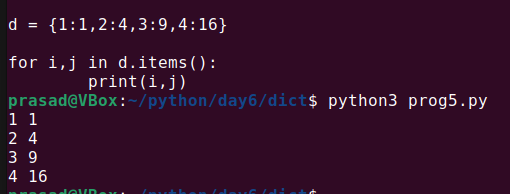
Expected Result : {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}



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



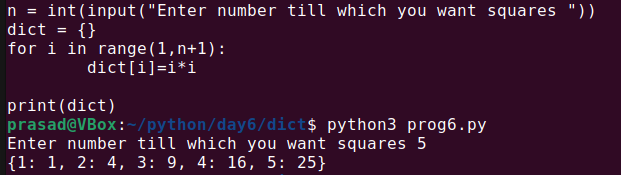
5. Write a Python program to iterate over dictionaries using for loops.



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) :

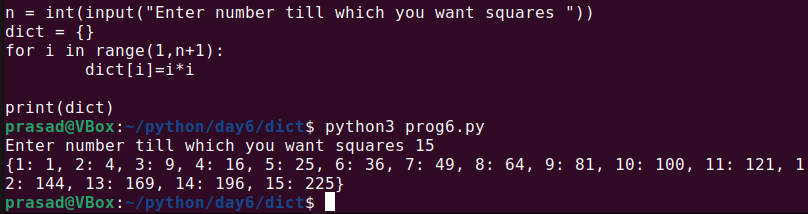
Expected Output : {1: 1, 2: 4, 3: 9, 4: 16, 5: 25}



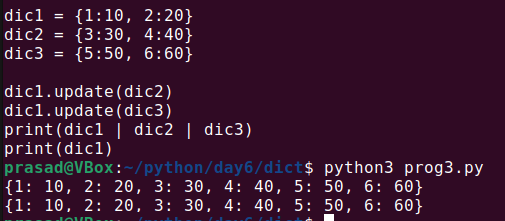
7. Write a Python script to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are the square of the keys.

Sample Dictionary

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121, 12: 144, 13: 169, 14: 196, 15: 225}

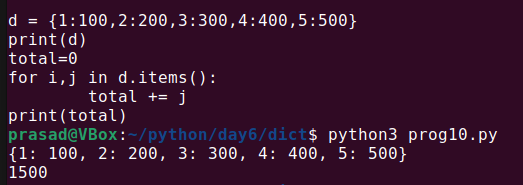


8. Write a Python script to merge two Python dictionaries.

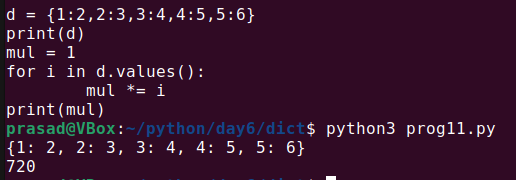


9. Write a Python program to iterate over dictionaries using for loops.

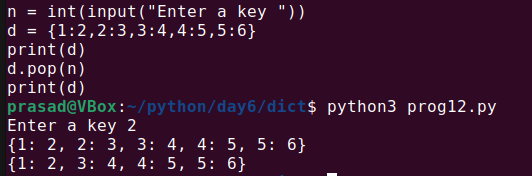
10. Write a Python program to sum all the items in a dictionary.



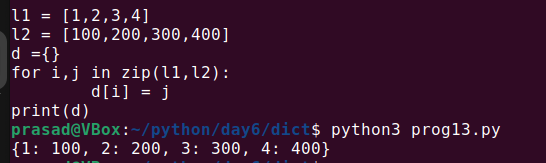
11. Write a Python program to multiply all the items in a dictionary.



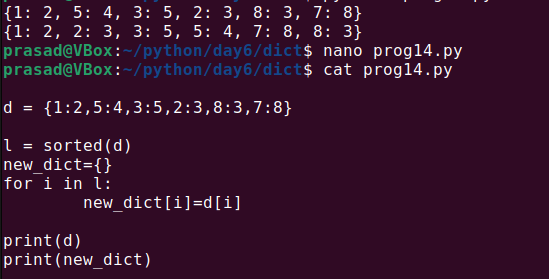
12. Write a Python program to remove a key from a dictionary.



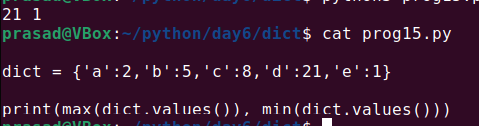
13. Write a Python program to map two lists into a dictionary.



14. Write a Python program to sort a given dictionary by key. And output should be a dictionary.

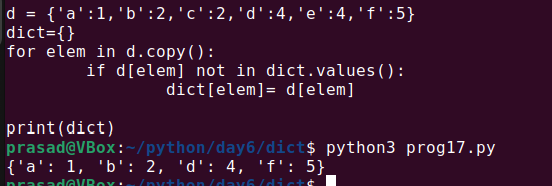


15. Write a Python program to get the maximum and minimum values of a dictionary.

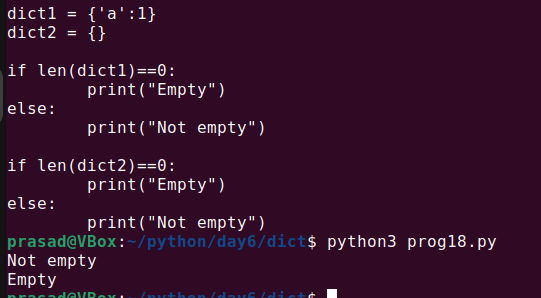


16. Write a Python program to get a dictionary from an object's fields.

17. Write a Python program to remove duplicates from the dictionary.



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

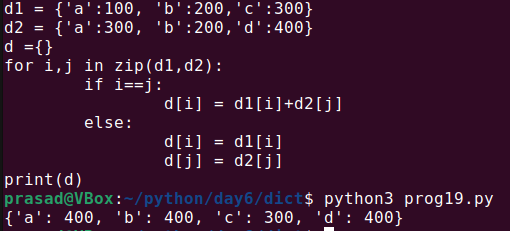


19. Write a Python program to combine two dictionary by adding values for common keys.

d1 = {'a': 100, 'b': 200, 'c':300}

d2 = {'a': 300, 'b': 200, 'd':400}

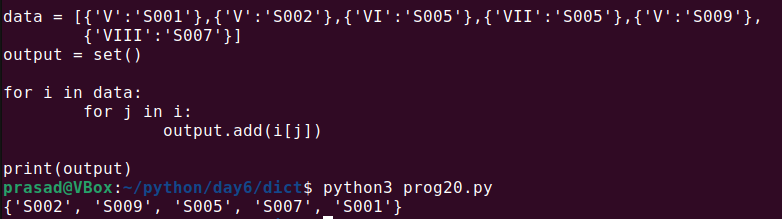
Sample output: Counter({'a': 400, 'b': 400, 'd': 400, 'c': 300})



20. Write a Python program to print all distinct values in a dictionary.

Sample Data : [{"V":"S001"}, {"V": "S002"}, {"VI": "S001"}, {"VI": "S005"}, {"VII":"S005"}, {"V":"S009"},{"VIII":"S007"}]

Expected Output : Unique Values: {'S005', 'S002', 'S007', 'S001', 'S009'}



21. Write a Python program to create and display all combinations of letters, selecting each letter from a different key in a dictionary.

Sample data : {'1':['a','b'], '2':['c','d']}

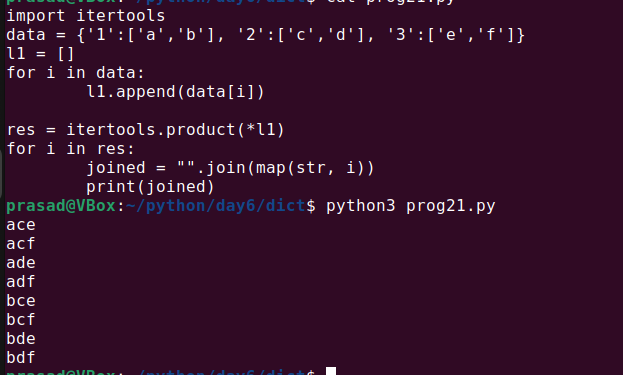
Expected Output:

ac

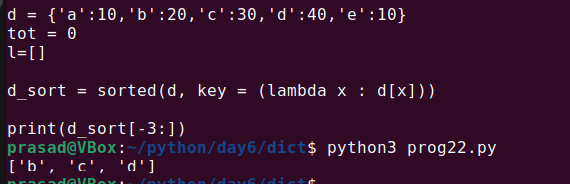
ad

bc

bd



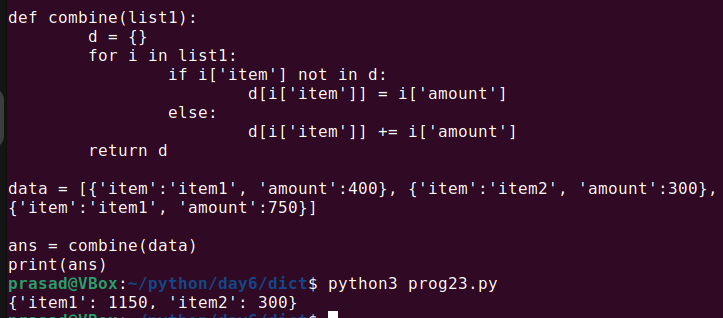
22. Write a Python program to find the highest 3 values of corresponding keys in a dictionary.



23. Write a Python program to combine values in a list of dictionaries.

Sample data: [{'item': 'item1', 'amount': 400}, {'item': 'item2', 'amount': 300}, {'item': 'item1', 'amount': 750}]

Expected Output: Counter({'item1': 1150, 'item2': 300})

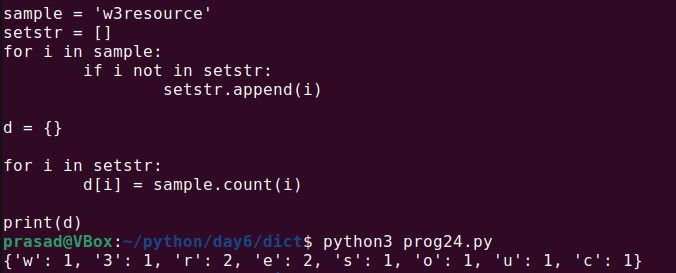


24. Write a Python program to create a dictionary from a string.

Note: Track the count of the letters from the string.

Sample string : 'w3resource'

Expected output: {'w': 1, '3': 1, 'r': 2, 'e': 2, 's': 1, 'o': 1, 'u': 1, 'c': 1}



25. Write a Python program to print a dictionary in table format.

26. Write a Python program to count the values associated with a key in a dictionary.

Expected Output:

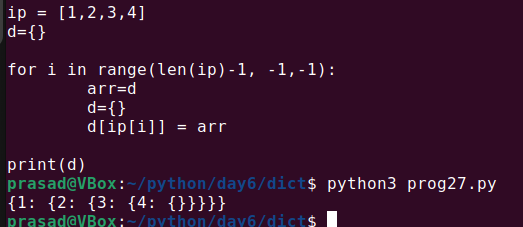
6

2

27. Write a Python prforogram to convert a list into a nested dictionary of keys.

Ex. i/p [1, 2, 3, 4]

o/p {1: {2: {3: {4: {}}}}}



28. Write a Python program. There is a dictionary where values contain list of integers.

So, program should sort that list and return complete dictionary

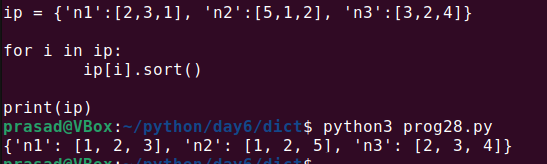
Ex.

i/p

{'n1': [2, 3, 1], 'n2': [5, 1, 2], 'n3': [3, 2, 4]}

o/p

{'n1': [1, 2, 3], 'n2': [1, 2, 5], 'n3': [2, 3, 4]}



29. Write a Python program to remove spaces from dictionary keys.

After removing spaces if keys repeat then keep the latest value.

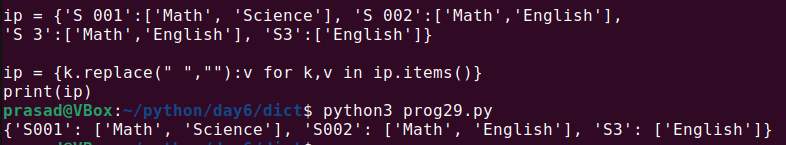
Ex.

i/p

{'S 001': ['Math', 'Science'], 'S 002': ['Math', 'English'], 'S 3':['Math', 'English'], 'S3':['English'], }

o/p

{'S001': ['Math', 'Science'], 'S002': ['Math', 'English'], 'S3':['English']}



30. Write a Python program to get the top three items in a shop.

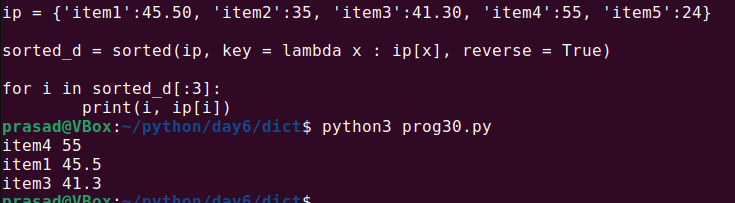
Sample data: {'item1': 45.50, 'item2':35, 'item3': 41.30, 'item4':55, 'item5': 24}

Expected Output:

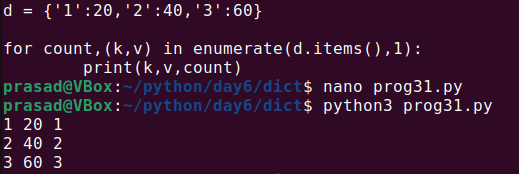
item4 55

item1 45.5

item3 41.3



31. Write a Python program to get the key, value and item in a dictionary.



32. Write a Python program to print a dictionary line by line.

Ex.

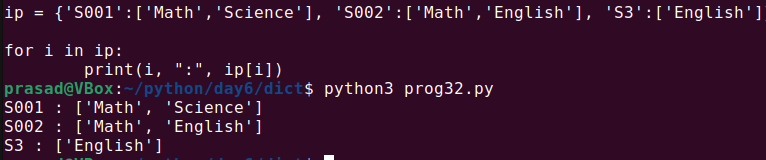
i/p {'S001': ['Math', 'Science'], 'S002': ['Math', 'English'], 'S3':['English']}

o/p

'S001':['Math', 'Science']

'S002':['Math', 'English']

'S3':['English']



33. Write a Python program to check if multiple keys exist in a dictionary.

76. Write a Python program to combine two lists into a dictionary.

The elements of the first one serve as keys and the elements of the second one serve as values. Each item in the first list must be unique and hashable.

Sample Output:

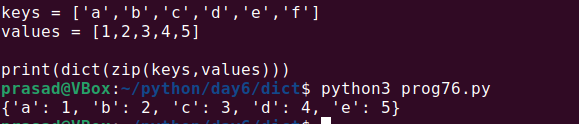
Original lists:

['a', 'b', 'c', 'd', 'e', 'f']

[1, 2, 3, 4, 5]

Combine the values of the said two lists into a dictionary:

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



77. Write a Python program to transform a dictionary into a list of tuples.

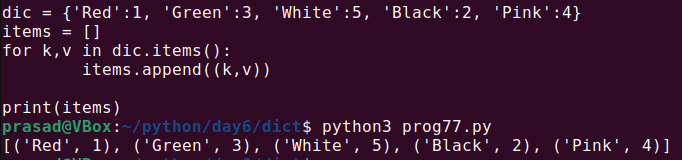
Sample Output:

Original Dictionary:

{'Red': 1, 'Green': 3, 'White': 5, 'Black': 2, 'Pink': 4}

Convert the said dictionary to a list of tuples:

[('Red', 1), ('Green', 3), ('White', 5), ('Black', 2), ('Pink', 4)]



79. Write a Python program to create a flat list of all the values in a flat dictionary.

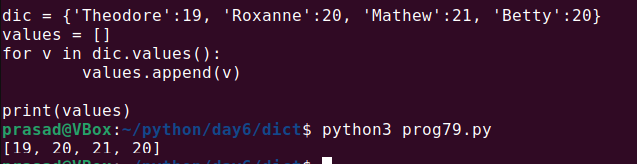
Sample Output:

Original dictionary elements:

{'Theodore': 19, 'Roxanne': 20, 'Mathew': 21, 'Betty': 20}

Create a flat list of all the values of the said flat dictionary:

[19, 20, 21, 20]



80. Write a Python program to find the key of the maximum and minimum value in a dictionary.

Sample Output:

Original dictionary elements:

{'Theodore': 19, 'Roxanne': 22, 'Mathew': 21, 'Betty': 20}

Finds the key of the maximum and minimum value of the said dictionary:

('Roxanne', 'Theodore')

