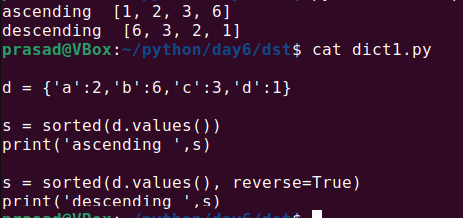
DICTIONARY PRACTICE

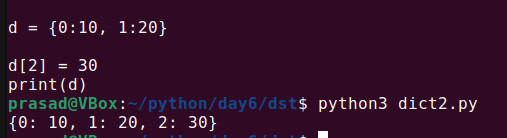
1. Write a Python script to sort (ascending and descending) a dictionary by value.



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.

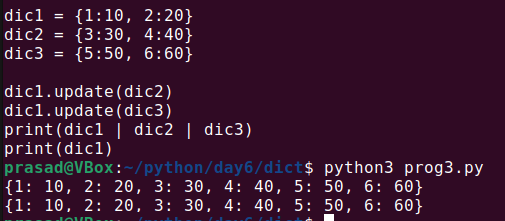
Sample Dictionary :

dic1={1:10, 2:20}

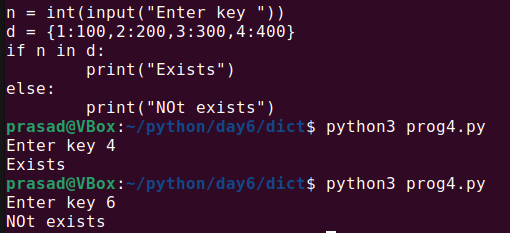
dic2={3:30, 4:40}

dic3={5:50,6:60}

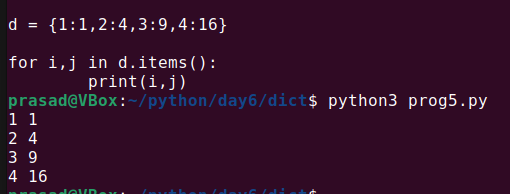
Expected Result : {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}



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



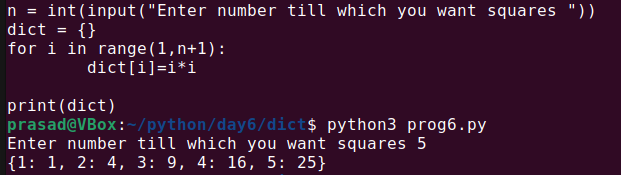
5. Write a Python program to iterate over dictionaries using for loops.



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) :

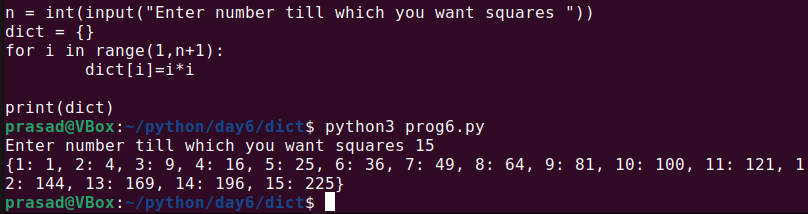
Expected Output : {1: 1, 2: 4, 3: 9, 4: 16, 5: 25}



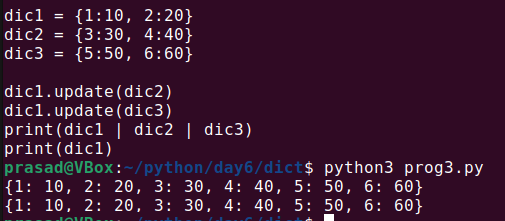
7. Write a Python script to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are the square of the keys.

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}

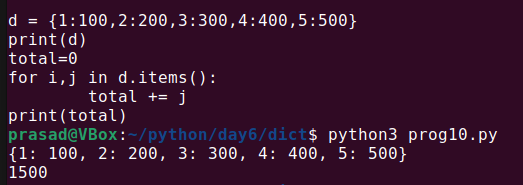


8. Write a Python script to merge two Python dictionaries.

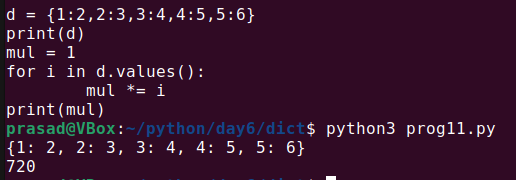


9. Write a Python program to iterate over dictionaries using for loops.

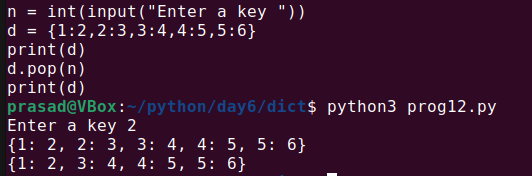
10. Write a Python program to sum all the items in a dictionary.



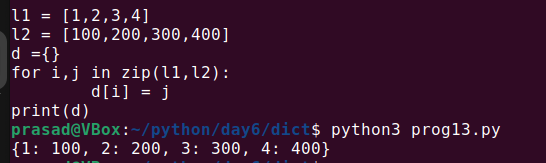
11. Write a Python program to multiply all the items in a dictionary.



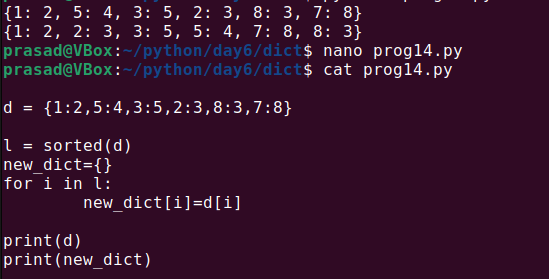
12. Write a Python program to remove a key from a dictionary.



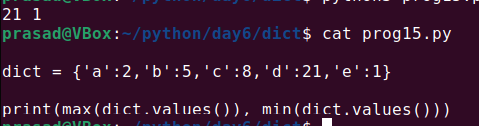
13. Write a Python program to map two lists into a dictionary.



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

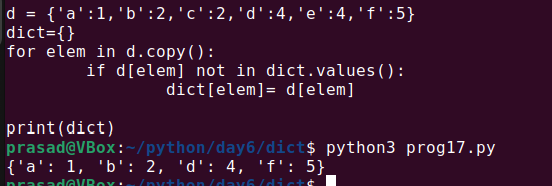


15. Write a Python program to get the maximum and minimum values of a dictionary.

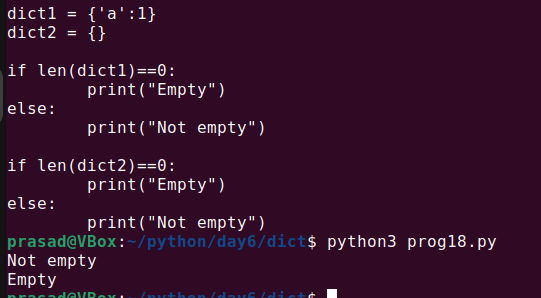


16. Write a Python program to get a dictionary from an object's fields.

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.

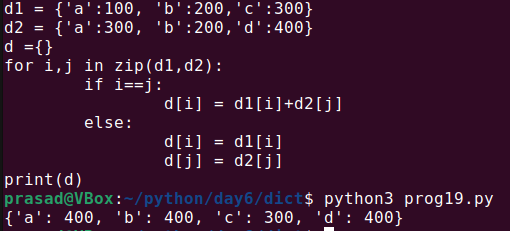


19. Write a Python program to combine two dictionary by adding values for common keys.

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

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

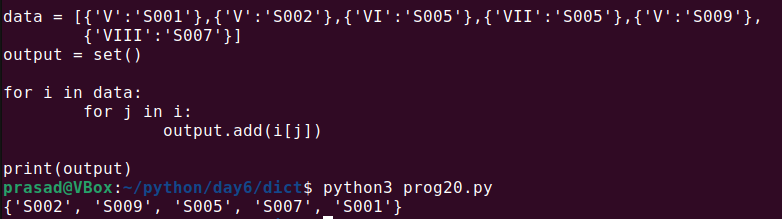
Sample output: Counter({'a': 400, 'b': 400, 'd': 400, 'c': 300})



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']}

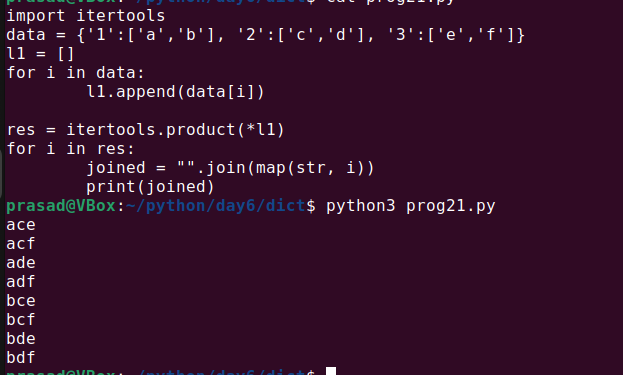
Expected Output:

ac

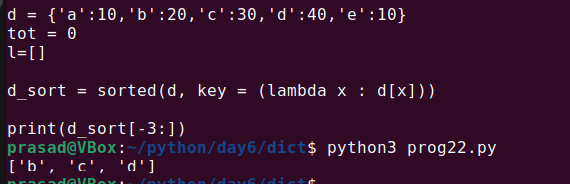
ad

bc

bd



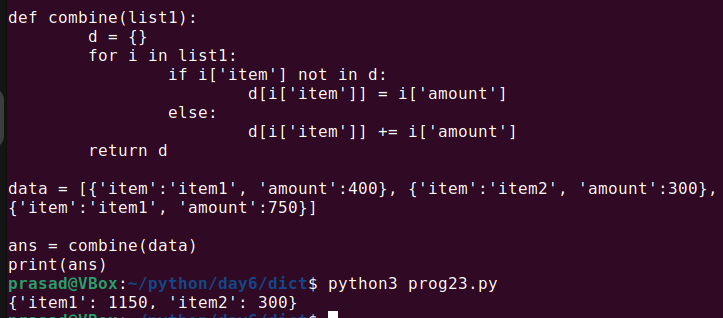
22. Write a Python program to find the highest 3 values of corresponding keys in a dictionary.



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})

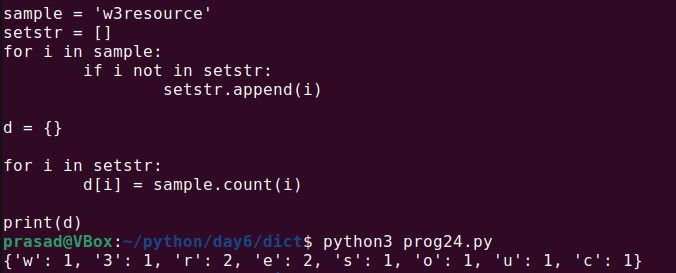


24. Write a Python program to create a dictionary from a string.

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:

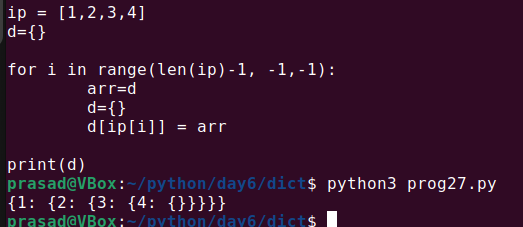
6

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

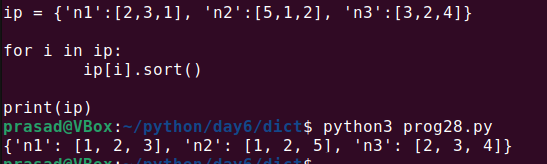
Ex.

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.

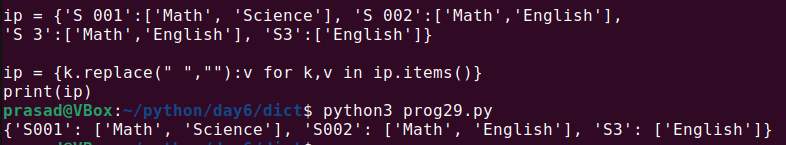
Ex.

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.

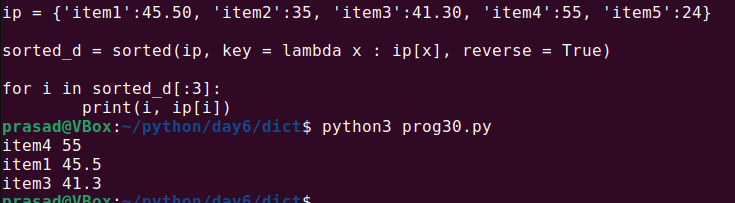
Sample data: {'item1': 45.50, 'item2':35, 'item3': 41.30, 'item4':55, 'item5': 24}

Expected Output:

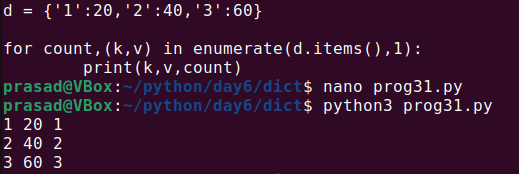
item4 55

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.

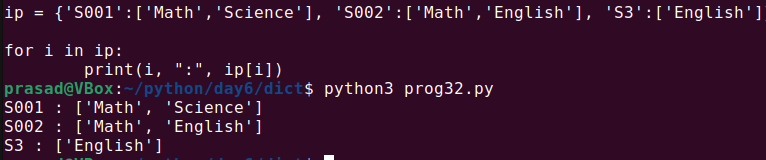
i/p {'S001': ['Math', 'Science'], 'S002': ['Math', 'English'], 'S3':['English']}

o/p

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

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

'S3':['English']



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