

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

[Go to the editor](#)

[Click me to see the sample solution](#)

2. Write a Python script to add a key to a dictionary. [Go to the editor](#)

Sample Dictionary : {0: 10, 1: 20}

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

[Click me to see the sample solution](#)

3. Write a Python script to concatenate following dictionaries to create a new one. [Go to the editor](#)

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}

[Click me to see the sample solution](#)

4. Write a Python script to check whether a given key already exists in a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

5. Write a Python program to iterate over dictionaries using for loops. [Go to the editor](#)

[Click me to see the sample solution](#)

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). [Go to the editor](#)

Sample Dictionary (n = 5) :

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

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

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}

[Click me to see the sample solution](#)

8. Write a Python script to merge two Python dictionaries. [Go to the editor](#)

[Click me to see the sample solution](#)

9. Write a Python program to iterate over dictionaries using for loops. [Go to the editor](#)

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10. Write a Python program to sum all the items in a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

11. Write a Python program to multiply all the items in a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

12. Write a Python program to remove a key from a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

13. Write a Python program to map two lists into a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

14. Write a Python program to sort a dictionary by key. [Go to the editor](#)

[Click me to see the sample solution](#)

15. Write a Python program to get the maximum and minimum value in a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

16. Write a Python program to get a dictionary from an object's fields. [Go to the editor](#)

[Click me to see the sample solution](#)

17. Write a Python program to remove duplicates from Dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

18. Write a Python program to check a dictionary is empty or not. [Go to the editor](#)

[Click me to see the sample solution](#)

19. Write a Python program to combine two dictionary adding values for common keys. [Go to the editor](#)

```
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})

[Click me to see the sample solution](#)

20. Write a Python program to print all unique values in a dictionary. [Go to the editor](#)

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'}

[Click me to see the sample solution](#)

21. Write a Python program to create and display all combinations of letters, selecting each letter from a different key in a dictionary. [Go to the editor](#)

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

Expected Output:

ac

ad

bc

bd

[Click me to see the sample solution](#)

22. Write a Python program to find the highest 3 values of corresponding keys in a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

23. Write a Python program to combine values in python list of dictionaries. [Go to the editor](#)

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

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

[Click me to see the sample solution](#)

24. Write a Python program to create a dictionary from a string. [Go to the editor](#)

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}

[Click me to see the sample solution](#)

25. Write a Python program to print a dictionary in table format. [Go to the editor](#)

[Click me to see the sample solution](#)

26. Write a Python program to count the values associated with key in a dictionary. [Go to the editor](#)

Expected Output:

6

2

[Click me to see the sample solution](#)

27. Write a Python program to convert a list into a nested dictionary of keys. [Go to the editor](#)

[Click me to see the sample solution](#)

28. Write a Python program to sort a list alphabetically in a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

29. Write a Python program to remove spaces from dictionary keys. [Go to the editor](#)

[Click me to see the sample solution](#)

30. Write a Python program to get the top three items in a shop. [Go to the editor](#)

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

Expected Output:

item4 55

item1 45.5

item3 41.3

[Click me to see the sample solution](#)

31. Write a Python program to get the key, value and item in a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

32. Write a Python program to print a dictionary line by line. [Go to the editor](#)

[Click me to see the sample solution](#)

33. Write a Python program to check multiple keys exists in a dictionary. [Go to the editor](#)

[Click me to see the sample solution](#)

34. Write a Python program to count number of items in a dictionary value that is a list. [Go to the editor](#)

[Click me to see the sample solution](#)

35. Write a Python program to sort Counter by value. [Go to the editor](#)

Sample data : {'Math':81, 'Physics':83, 'Chemistry':87}

Expected data: [('Chemistry', 87), ('Physics', 83), ('Math', 81)]

[Click me to see the sample solution](#)

36. Write a Python program to create a dictionary from two lists without losing duplicate values. [Go to the editor](#)

Sample lists: ['Class-V', 'Class-VI', 'Class-VII', 'Class-VIII'], [1, 2, 2, 3]

Expected Output: defaultdict(<class 'set'>, {'Class-V': {1}, 'Class-VI': {2}, 'Class-VII': {2}, 'Class-VIII': {3}})

[Click me to see the sample solution](#)

37. Write a Python program to replace dictionary values with their average. [Go to the editor](#)

[Click me to see the sample solution](#)

38. Write a Python program to match key values in two dictionaries. [Go to the editor](#)

Sample dictionary: {'key1': 1, 'key2': 3, 'key3': 2}, {'key1': 1, 'key2': 2}

Expected output: key1: 1 is present in both x and y

[Click me to see the sample solution](#)

39. Write a Python program to store a given dictionary in a json file. [Go to the editor](#)

Original dictionary:

```
{'students': [{'firstName': 'Nikki', 'lastName': 'Roysden'}, {'firstName': 'Mervin', 'lastName': 'Friedland'}, {'firstName': 'Aron ', 'lastName': 'Wilkins'}], 'teachers':
```



```
{'firstName': 'Amberly', 'lastName': 'Calico'}, {'firstName': 'Regine', 'lastName': 'Agtarap']}]}
```

```
<class 'dict'>
```

Json file to dictionary:

```
{'students': [{'firstName': 'Nikki', 'lastName': 'Roysden'}, {'firstName': 'Mervin', 'lastName': 'Friedland'}, {'firstName': 'Aron ', 'lastName': 'Wilkins'}], 'teachers': [{'firstName': 'Amberly', 'lastName': 'Calico'}, {'firstName': 'Regine', 'lastName': 'Agtarap'}]}
```

[Click me to see the sample solution](#)

40. Write a Python program to create a dictionary of keys x, y, and z where each key has as value a list from 11-20, 21-30, and 31-40 respectively. Access the fifth value of each key from the dictionary. [Go to the editor](#)

```
{'x': [11, 12, 13, 14, 15, 16, 17, 18, 19],
```

```
'y': [21, 22, 23, 24, 25, 26, 27, 28, 29],
```

```
'z': [31, 32, 33, 34, 35, 36, 37, 38, 39]}
```

```
15
```

```
25
```

```
35
```

```
x has value [11, 12, 13, 14, 15, 16, 17, 18, 19]
```

```
y has value [21, 22, 23, 24, 25, 26, 27, 28, 29]
```

z has value [31, 32, 33, 34, 35, 36, 37, 38, 39]

[Click me to see the sample solution](#)

41. Write a Python program to drop empty Items from a given Dictionary. [Go to the editor](#)

Original Dictionary:

```
{'c1': 'Red', 'c2': 'Green', 'c3': None}
```

New Dictionary after dropping empty items:

```
{'c1': 'Red', 'c2': 'Green'}
```

[Click me to see the sample solution](#)

42. Write a Python program to filter a dictionary based on values. [Go to the editor](#)

Original Dictionary:

```
{'Cierra Vega': 175, 'Alden Cantrell': 180, 'Kierra Gentry': 165, 'Pierre Cox': 190}
```

Marks greater than 170:

```
{'Cierra Vega': 175, 'Alden Cantrell': 180, 'Pierre Cox': 190}
```

[Click me to see the sample solution](#)

43. Write a Python program to convert more than one list to nested dictionary. [Go to the editor](#)

Original strings:

```
['S001', 'S002', 'S003', 'S004']
```

['Adina Park', 'Leyton Marsh', 'Duncan Boyle', 'Saim Richards']

[85, 98, 89, 92]

Nested dictionary:

```
{'S001': {'Adina Park': 85}}, {'S002': {'Leyton Marsh': 98}}, {'S003': {'Duncan Boyle': 89}}, {'S004': {'Saim Richards': 92}}
```

[Click me to see the sample solution](#)

44. Write a Python program to filter the height and width of students, which are stored in a dictionary. [Go to the editor](#)

Original Dictionary:

```
{'Cierra Vega': (6.2, 70), 'Alden Cantrell': (5.9, 65), 'Kierra Gentry': (6.0, 68), 'Pierre Cox': (5.8, 66)}
```

Height > 6ft and Weight> 70kg:

```
{'Cierra Vega': (6.2, 70)}
```

[Click me to see the sample solution](#)

45. Write a Python program to check all values are same in a dictionary. [Go to the editor](#)

Original Dictionary:

```
{'Cierra Vega': 12, 'Alden Cantrell': 12, 'Kierra Gentry': 12, 'Pierre Cox': 12}
```

Check all are 12 in the dictionary.

True

Check all are 10 in the dictionary.

False

[Click me to see the sample solution](#)

46. Write a Python program to create a dictionary grouping a sequence of key-value pairs into a dictionary of lists. [Go to the editor](#)

Original list:

```
[('yellow', 1), ('blue', 2), ('yellow', 3), ('blue', 4), ('red', 1)]
```

Grouping a sequence of key-value pairs into a dictionary of lists:

```
{'yellow': [1, 3], 'blue': [2, 4], 'red': [1]}
```

[Click me to see the sample solution](#)

47. Write a Python program to split a given dictionary of lists into list of dictionaries. [Go to the editor](#)

Original dictionary of lists:

```
{'Science': [88, 89, 62, 95], 'Language': [77, 78, 84, 80]}
```

Split said dictionary of lists into list of dictionaries:

```
[{'Science': 88, 'Language': 77}, {'Science': 89, 'Language': 78}, {'Science': 62, 'Language': 84}, {'Science': 95, 'Language': 80}]
```

[Click me to see the sample solution](#)

48. Write a Python program to remove a specified dictionary from a given list. [Go to the editor](#)

Original list of dictionary:

```
[{'id': '#FF0000', 'color': 'Red'}, {'id': '#800000', 'color': 'Maroon'}, {'id': '#FFFF00', 'color': 'Yellow'}, {'id': '#808000', 'color': 'Olive'}]
```

Remove id #FF0000 from the said list of dictionary:

```
[{'id': '#800000', 'color': 'Maroon'}, {'id': '#FFFF00', 'color': 'Yellow'}, {'id': '#808000', 'color': 'Olive'}]
```

[Click me to see the sample solution](#)

49. Write a Python program to convert string values of a given dictionary, into integer/float datatypes. [Go to the editor](#)

Original list:

```
[{'x': '10', 'y': '20', 'z': '30'}, {'p': '40', 'q': '50', 'r': '60'}]
```

String values of a given dictionary, into integer types:

```
[{'x': 10, 'y': 20, 'z': 30}, {'p': 40, 'q': 50, 'r': 60}]
```

Original list:

```
[{'x': '10.12', 'y': '20.23', 'z': '30'}, {'p': '40.00', 'q': '50.19', 'r': '60.99'}]
```

String values of a given dictionary, into float types:

```
[{'x': 10.12, 'y': 20.23, 'z': 30.0}, {'p': 40.0, 'q': 50.19, 'r': 60.99}]
```

[Click me to see the sample solution](#)

50. A Python Dictionary contains List as value. Write a Python program to clear the list values in the said dictionary. [Go to the editor](#)

Original Dictionary:

```
{'C1': [10, 20, 30], 'C2': [20, 30, 40], 'C3': [12, 34]}
```

Clear the list values in the said dictionary:

```
{'C1': [], 'C2': [], 'C3': []}
```

[Click me to see the sample solution](#)

51. A Python Dictionary contains List as value. Write a Python program to update the list values in the said dictionary. [Go to the editor](#)

Original Dictionary:

```
{'Math': [88, 89, 90], 'Physics': [92, 94, 89], 'Chemistry': [90, 87, 93]}
```

Update the list values of the said dictionary:

```
{'Math': [89, 90, 91], 'Physics': [90, 92, 87], 'Chemistry': [90, 87, 93]}
```

[Click me to see the sample solution](#)

52. Write a Python program to extract a list of values from a given list of dictionaries. [Go to the editor](#)

Original Dictionary:

```
[{'Math': 90, 'Science': 92}, {'Math': 89, 'Science': 94}, {'Math': 92, 'Science': 88}]
```

Extract a list of values from said list of dictionaries where subject = Science

[92, 94, 88]

Original Dictionary:

[{'Math': 90, 'Science': 92}, {'Math': 89, 'Science': 94}, {'Math': 92, 'Science': 88}]

Extract a list of values from said list of dictionaries where subject = Math

[90, 89, 92]

[Click me to see the sample solution](#)

53. Write a Python program to find the length of a given dictionary values. [Go to the editor](#)

Original Dictionary:

{1: 'red', 2: 'green', 3: 'black', 4: 'white', 5: 'black'}

Length of dictionary values:

{'red': 3, 'green': 5, 'black': 5, 'white': 5}

Original Dictionary:

{'1': 'Austin Little', '2': 'Natasha Howard', '3': 'Alfred Mullins', '4': 'Jamie Rowe'}

Length of dictionary values:

{'Austin Little': 13, 'Natasha Howard': 14, 'Alfred Mullins': 14, 'Jamie Rowe': 10}

[Click me to see the sample solution](#)

54. Write a Python program to get the depth of a dictionary. [Go to the editor](#)

Expected Output:

4

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55. Write a Python program to access dictionary key's element by index. [Go to the editor](#)

Expected Output:

physics

math

chemistry

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56. Write a Python program to convert a given dictionary into a list of lists. [Go to the editor](#)

Original Dictionary:

```
{1: 'red', 2: 'green', 3: 'black', 4: 'white', 5: 'black'}
```

Convert the said dictionary into a list of lists:

```
[[1, 'red'], [2, 'green'], [3, 'black'], [4, 'white'], [5, 'black']]
```

Original Dictionary:

```
{'1': 'Austin Little', '2': 'Natasha Howard', '3': 'Alfred Mullins', '4': 'Jamie Rowe'}
```


Convert the said dictionary into a list of lists:

```
[[ '1', 'Austin Little'], [ '2', 'Natasha Howard'], [ '3', 'Alfred Mullins'], [ '4', 'Jamie Rowe']]
```

[Click me to see the sample solution](#)

57. Write a Python program to filter even numbers from a given dictionary values.

[Go to the editor](#)

Original Dictionary:

```
{'V': [1, 4, 6, 10], 'VI': [1, 4, 12], 'VII': [1, 3, 8]}
```

Filter even numbers from said dictionary values:

```
{'V': [4, 6, 10], 'VI': [4, 12], 'VII': [8]}
```

Original Dictionary:

```
{'V': [1, 3, 5], 'VI': [1, 5], 'VII': [2, 7, 9]}
```

Filter even numbers from said dictionary values:

```
{'V': [], 'VI': [], 'VII': [2]}
```

[Click me to see the sample solution](#)

58. Write a Python program to get all combinations of key-value pairs in a given dictionary. [Go to the editor](#)

Original Dictionary:

```
{'V': [1, 4, 6, 10], 'VI': [1, 4, 12], 'VII': [1, 3, 8]}
```

Combinations of key-value pairs of the said dictionary:

```
{'V': [1, 4, 6, 10], 'VI': [1, 4, 12]}, {'V': [1, 4, 6, 10], 'VII': [1, 3, 8]}, {'VI': [1, 4, 12], 'VII': [1, 3, 8]}
```

Original Dictionary:

```
{'V': [1, 3, 5], 'VI': [1, 5]}
```

Combinations of key-value pairs of the said dictionary:

```
{'V': [1, 3, 5], 'VI': [1, 5]}
```

[Click me to see the sample solution](#)

59. Write a Python program to find the specified number of maximum values in a given dictionary. [Go to the editor](#)

Original Dictionary:

```
{'a': 5, 'b': 14, 'c': 32, 'd': 35, 'e': 24, 'f': 100, 'g': 57, 'h': 8, 'i': 100}
```

1 maximum value(s) in the said dictionary:

```
['f']
```

2 maximum value(s) in the said dictionary:

```
['f', 'i']
```

5 maximum value(s) in the said dictionary:

```
['f', 'i', 'g', 'd', 'c']
```

[Click me to see the sample solution](#)

60. Write a Python program to find shortest list of values with the keys in a given dictionary. [Go to the editor](#)

Original Dictionary: {'V': [10, 12], 'VI': [10], 'VII': [10, 20, 30, 40], 'VIII': [20], 'IX': [10, 30, 50, 70], 'X': [80]} Shortest list of values with the keys of the said dictionary: ['VI', 'VIII', 'X']

[Click me to see the sample solution](#)

61. Write a Python program to count the frequency in a given dictionary. [Go to the editor](#)

Original Dictionary:

{'V': 10, 'VI': 10, 'VII': 40, 'VIII': 20, 'IX': 70, 'X': 80, 'XI': 40, 'XII': 20}

Count the frequency of the said dictionary:

Counter({10: 2, 40: 2, 20: 2, 70: 1, 80: 1})

[Click me to see the sample solution](#)

62. Write a Python program to extract values from a given dictionaries and create a list of lists from those values. [Go to the editor](#)

Original Dictionary:

[{'student_id': 1, 'name': 'Jean Castro', 'class': 'V'}, {'student_id': 2, 'name': 'Lula Powell', 'class': 'V'}, {'student_id': 3, 'name': 'Brian Howell', 'class': 'VI'}, {'student_id': 4, 'name': 'Lynne Foster', 'class': 'VI'}, {'student_id': 5, 'name': 'Zachary Simon', 'class': 'VII'}]

Extract values from the said dictionary and create a list of lists using those values:

```
[[1, 'Jean Castro', 'V'], [2, 'Lula Powell', 'V'], [3, 'Brian Howell', 'VI'], [4, 'Lynne Foster', 'VI'], [5, 'Zachary Simon', 'VII']]
```

```
[[1, 'Jean Castro'], [2, 'Lula Powell'], [3, 'Brian Howell'], [4, 'Lynne Foster'], [5, 'Zachary Simon']]
```

```
[['Jean Castro', 'V'], ['Lula Powell', 'V'], ['Brian Howell', 'VI'], ['Lynne Foster', 'VI'], ['Zachary Simon', 'VII']]
```

[Click me to see the sample solution](#)

63. Write a Python program to convert a given list of lists to a dictionary. [Go to the editor](#)

Original list of lists:

```
[[1, 'Jean Castro', 'V'], [2, 'Lula Powell', 'V'], [3, 'Brian Howell', 'VI'], [4, 'Lynne Foster', 'VI'], [5, 'Zachary Simon', 'VII']]
```

Convert the said list of lists to a dictionary:

```
{1: ['Jean Castro', 'V'], 2: ['Lula Powell', 'V'], 3: ['Brian Howell', 'VI'], 4: ['Lynne Foster', 'VI'], 5: ['Zachary Simon', 'VII']}
```

[Click me to see the sample solution](#)

64. Write a Python program to create a key-value list pairings in a given dictionary. [Go to the editor](#)

Original dictionary:

```
{1: ['Jean Castro'], 2: ['Lula Powell'], 3: ['Brian Howell'], 4: ['Lynne Foster'], 5: ['Zachary Simon']}
```

A key-value list pairings of the said dictionary:

```
[[1: 'Jean Castro', 2: 'Lula Powell', 3: 'Brian Howell', 4: 'Lynne Foster', 5: 'Zachary Simon']]
```

[Click me to see the sample solution](#)

65. Write a Python program to get the total length of all values of a given dictionary with string values. [Go to the editor](#)

Original dictionary:

```
{'#FF0000': 'Red', '#800000': 'Maroon', '#FFFF00': 'Yellow', '#808000': 'Olive'}
```

Total length of all values of the said dictionary with string values:

20

[Click me to see the sample solution](#)

66. Write a Python program to check if a specific Key and a value exist in a dictionary. [Go to the editor](#)

Original dictionary:

```
[{'student_id': 1, 'name': 'Jean Castro', 'class': 'V'}, {'student_id': 2, 'name': 'Lula Powell', 'class': 'V'}, {'student_id': 3, 'name': 'Brian Howell', 'class': 'VI'},
```

```
{'student_id': 4, 'name': 'Lynne Foster', 'class': 'VI'}, {'student_id': 5, 'name':  
'Zachary Simon', 'class': 'VII'}]
```

Check if a specific Key and a value exist in the said dictionary:

True

True

True

False

False

False

[Click me to see the sample solution](#)