

1. 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

2. 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}

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

4. Write a Python program to sort a list alphabetically in a dictionary

5. 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

6. Write a Python program to sort Counter by value.

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

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

7. Write a Python program to convert more than one list to nested dictionary.

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}}]

8. Write a Python program to sum all the items in a list.

9. Write a Python program to multiply all the items in a list.

10. Write a Python program to count the number of strings where the string length is 2 or more and the first and last character are same from a given list of strings.

11. Write a Python program to get a list, sorted in increasing order by the last element in each tuple from a given list of non-empty tuples.

Sample List : [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)]

Expected Result : [(2, 1), (1, 2), (2, 3), (4, 4), (2, 5)]

12. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']

Expected Output : ['Green', 'White', 'Black']

13. Write a Python program to generate all permutations of a list in Python.

14. Write a Python program to get the difference between the two lists.

15. Write a Python program to get the frequency of the elements in a list.