

REBOOT ACADEMY

Computer Training Institute Python: String, List, Dictionary

1. Write a Python program to count the number of characters (character frequency) in a string.
Sample String: google.com'
Expected Result : {'o': 3, 'g': 2, '.': 1, 'e': 1, 'l': 1, 'm': 1, 'c': 1}
2. Write a Python program to get a string made of the first 3 and the last 3 chars from a given a string. If the string length is less than 3, return empty string
Sample String : 'rebootacademy'
Expected Result : 'rebemy'
Sample String : 'reb'
Expected Result : 'rebreb'
Sample String : ' re'
Expected Result : Empty String
3. 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.
Sample List : ['abc', 'xyz', 'aba', '1221']
Expected Result : 2
4. Write a Python program to get a single string from two given strings, separated by a space and swap the first two characters of each string.
Sample String : 'abc', 'xyz'
Expected Result : 'xyc abz'
5. Write a Python program to remove duplicates from a list.
6. Write a Python function to convert a given string to all uppercase if it contains at least 2 uppercase characters in the first 4 characters.
Sample String: 'PyThon'
Expected Result: 'PYTHON'
7. 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)]

8. Write a Python function that takes two lists and returns True if they have at least one common member.
9. 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}
10. 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})
11. Write a Python program to reverse words in a string.
Sample String: 'reboot academy'
Expected String: 'toober ymedaca'
12. Write a Python program to find the highest 3 values in a dictionary.