

## PYTHON PROGRAMMING

### COLLECTIONS

1. Create a “ContactList” using OrderedDict(D1) to store name and phone number of contacts added.

The program should have the following abilities:

a) Check if a particular key exists or not

b) Check if a particular value exists or not

c) Develop a method which iterates through the map D1 and creates another map D2 with phone number as the key and value as name and returns the Map D2.

2. Write a python program to solve problem.

In how many different ways can the letters of the particular word be arranged?

Explanation:

The word 'RUMOUR' has 6 letters.

In these 6 letters, 'R' occurs 2 times, 'U' occurs 2 times and rest of the letters are different.

Hence, number of ways to arrange these letters

$6!$

$----- = 180$

$2! * 2!$

3. Create a named tuples Person1 to Person5 with parameters (name,age,height). Then sort tuples by ascending order where name is string, age and height are numbers. If the names are same then sort by age. If ages are same then sort by height. Access tuple values by object notation eg. Person1.name.

Following tuples should given as input to program:

Tom, 19, 80

John, 20, 90

Johy, 17, 91

Johy, 17, 93

Json, 21, 85

4. Given a string S containing letters and '#'. The '#' represents a backspace. The task is to print the new string without '#'. Traverse the string S. If any character except '#' is found push it at back in deque. if the character '#' is found pop a character from back of deque. Finally pop all elements from front of deque to make new string.

5. Write a Python program to count the values associated with key in a dictionary. If value is not available for particular key, default factory value should be returned.

Sample data: = [{ 'id': 1, 'success': True, 'name': 'Lary'}, { 'id': 2, 'success': False, 'name': 'Rabi'}, { 'id': 3, 'success': True, 'name': 'Alex' }]

**Input 1:**

key='success' and value = True.

Then output will be 2.

**Input 2:**

key='kce' and value=True

'Key not found.'