# Python LAB 2 Questions

Fundamentals of data science

1. Write a Python program to get a string made of the first 2 and the last 2 chars from a given string. If the string length is less than 2, programme should print ‘String has less than 2 characters’.

Str1 = ‘data science’ Expected output: ‘dace’

Str2 = ‘a’ Expected Output: ‘String has less than 2 characters’

1. Take any string which has more than 5 characters and write a program to reverse it. Do not use the inbuild function.
2. Write a Python program to change a given string to a new string where the first and last chars have been exchanged. You can take any string you want.
3. Take any list with only numbers in it. Write a program to sum all items in a list.

e.g list1 = [ 1, 2, 3, 4, 5, 6] expected output: 21

1. Take any list with only numbers in it. Write a program to get the smallest number in it. If largest element occurs multiple time, also print how many times that number occurs.
2. Take any list with some elements occurring multiple times in that list. Write a program to remove duplicates from list.
3. Write a Python script to concatenate 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}

1. Create any dictionary and write a program to get maximum and minimum value in a dictionary.
2. Create any dictionary and write a program to print all unique values in dictionary.