Computing Tools Lab2

Deadline: 17th January 2018 12 A.M.

Instructions

1. Create a folder named <rollno_assign4>, and save all the python programs as per the question numbers in this folder.

For example: 1.py, 2.py, 3.py, etc.

- 2. No need of script file.
- 3. The <rollno assign4>.tar.gz of the above folder should be uploaded on Moodle.
- 4. File and folder names should be followed strictly as mentioned in the questions below (including case sensitivity). Marks will not be awarded if any discrepancies occur.
- 5. There should not be any extra space or line(s) in the output. Otherwise, marks will not be awarded.
- 6. Read all the guestions carefully before you start to answer them.
- 7. Post doubts if any in doubts forum on moodle.

Q1. Write a python program to ask the user's name and age. And print them in the given format. 'Hi! You are <user name> and your age is <age>.'

Example,

python 1.py

Name? Computing

Age? 100

Output:

Hi! You are Computing and your age is 100.

- Q2. Write a python code to perform certain operations on a given string. Name="Llanfairpwllgwyngyllgogerychwyrndrobwllllantysiliogogogoch".
- 1. Print the length of the string.
- 2. Concatenate the string with "llovepython" again print the length.
- 3. Take a number as a user input and concatenate number 5 times.
- 4. Make a seperate list of all even indices from the updated string
- 5. Print the reverse of the string created in a step 4
- 6. Replace all the numbers in a string created in step 4 with "a"
- 7. Replace all letters in a string to uppercase in a updated string.

Example output:

name="llovepython"

1. Length: 11

2. Str2: "llovepythonllovepython" Length:22

- 3. Str3: "llovepythonllovepython22222"
- 4. I1: ['I', 'o', 'e', 'y', 'h', 'n', 'I', 'v', 'p', 't', 'o', '2', '2', '2']
- 5. 222otpvlnhyeol
- 6. aaaotpvlnhyeol
- 7. AAAOTPVLNHYEOI
- Q3. Write a code to print table of n (N is user input from keyboard) in the following format.

7x1=7

7x2=14

7x3=21

- Q4. Take a user input of string of length =10 and should contain at least two repeating elements. Convert the string to different data types: List, Tuple, Set.
- a. crate 2 separates list1= string and list2= integer merge two lists in such a way that alternate element must be integer. Convert a list to dictionary such that key will be string and value will be integer.

eg. list1= ['a','b','c','d','e'] list2= [1,2,3,4,5] merged_list=['a',1,'b','2','c',3,'d',4,'e',5] dict1= {'a':1,'b':2,'c':3,'d':4,'e':5}

- Q5. Write a code to print the list of 10 numbers. Extract the even and odd numbers from the list and print sum of the numbers in seperate strings.
- eg. List1= [1,2,3,4,5,6,7,8,9,10] even=[2,4,6,8,10] odd=[1,3,5,7,9] even_sum=[30] odd_sum=[25]