Excellence Technologies

Python Written Test

horizontal line

31 JAN 2019

# Question1

Use python lists and make an list of numbers.

Write a function which returns sum of the list of numbers

**Answer**

**li = [1,2,3,4,5]**

**total = 0**

**for i in range(0,len(li)):**

**total = total+li[i]**

**print(total)**

# Question2

Setup a dict structure like this in python

Dict1: (this is a key, value pair of user id and username)

{

“1” : “name1”,

“2” : “name2”,

“3” : “name3”

} etc..

Dict2: (this is a key value pair of user id and exam score)

{

“1” : 50,

“2” : 60

“3” : 70

}

These are just sample data assume there are hundreds of users

Write a function in python in python, which will return maximum i.e function should return dictionary like

{

“3” : 70

}

**Answer**

**def max\_value\_dict(d):**

**k = {key: value for key, value in d.items() if value == max(d.values())}**

**return k**

**dict1 = {'1':50, '2':60, '3': 70}**

**dict2= max\_value\_dict(dict1)**

**print(dict2)**

# Question 3

Assume we have list like this

[0,0,0,1,1,1,0,0,0,1,1,0,1,1,1,1,0,0,1,1]

Basically a list of zero’s and one’s.

Write a python function to the number of maximum consecutive one’s present in the array.

E.g output for the above array would be 4

**Answer**

**def max\_consective\_ones(l):**

**count = 0**

**result = 0**

**for i in range(0,len(l)):**

**if l[i] == 0:**

**count=0**

**else:**

**count += 1**

**result = max(result,count)**

**return result**

**l1 = [0,0,0,1,1,1,0,0,0,1,1,0,1,1,1,1,0,0,1,1]**

**max\_consective\_ones = max\_consective\_ones(l1)**

**print(max\_consective\_ones)**

# Question 4

Design a mysql database. Requirements are as follows

1. We have two entities “candidate” and “test\_score”
2. candidate has properties name, email address
3. Every candidate has to give 3 tests like “first\_round”, “second\_round” , “third\_round” and scoring for every test is done out of 10.

Now using flask/django, need to create rest api to do the following

1. Insert a candidate into database
2. Assign score for a candidate based on the test
3. Api to get highest scoring candidate and average scores per round for all candidates

Next,

Write a route in flask or django GET, POST route to save a user, login a user, add/update address for that user.