CargoFL (Innoctive Technologies Pvt Ltd)

Full Stack Developer Assessment

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# Day -1 Python Assessment

There are five questions in all in this test. You must go through the questions and create the code necessary to provide the results required by each one. The answer also needs to satisfy the test cases.

### Question 1:

Given an "out" string length 4, such as "<<>>", and a word, return a new string where the word is in the middle of the out string, e.g. "<<word>>".

make\_out\_word('<<>>', 'Yay') → '<<Yay>>'

make\_out\_word('<<>>', 'WooHoo') → '<<WooHoo>>'

make\_out\_word('[[]]', 'word') → '[[word]]'

SOLUTION:

Out\_string = input(“Enter any string of length 4 : ”)

New\_string =input(“Enter a string : “)

print(Out\_string[ :2]+””+New\_string+””+Out\_string[2::])

### Question 2:

Given an array of ints, return True if 6 appears as either the first or last element in the array. The array will be length 1 or more.

first\_last6([1, 2, 6]) → True

first\_last6([6, 1, 2, 3]) → True

first\_last6([13, 6, 1, 2, 3]) → False

SOLUTION:

import numpy

def array(l):

a=numpy.array(l)

if a[0]==6 or a[len(a)-1]==6:

return True

else:

return False

array([6,4,7,8])

### Question 3:

Given 2 int arrays, a and b, each length 3, return a new array length 2 containing their middle elements.

middle\_way([1, 2, 3], [4, 5, 6]) → [2, 5]

middle\_way([7, 7, 7], [3, 8, 0]) → [7, 8]

middle\_way([5, 2, 9], [1, 4, 5]) → [2, 4]

SOLUTION:

import numpy

a=[1,2,3]

b=[4,5,6]

a1=numpy.array(a)

b1=numpy.array(b)

c=(a[1],b[1])

z=numpy.array(c)

print(z)

### Question 4:

Given a Matrix, convert it into the dictionary with keys as row numbers and values as a nested list.

Input : test\_list = [[5, 6, 7], [8, 3, 2]]

Output : {1: [5, 6, 7], 2: [8, 3, 2]}

Explanation: Matrix rows are paired with row numbers in order.

SOLUTION:

x=[[1,2,3],[4,5,6],[7,8,9]]

l=len(x)

d={}

for i in range(l):

for j in x:

d[i+1]=j

print(d)

Input : test\_list = [[5, 6, 7]]

Output : {1: [5, 6, 7]}

Explanation: Matrix rows are paired with row numbers in order.

### Question 5:

Write a Python program to convert them into a dictionary in a way that item from list1 is the key and item from list2 is the value

keys = ['Ten', 'Twenty', 'Thirty']

values = [10, 20, 30]

Output - {'Ten': 10, 'Twenty': 20, 'Thirty': 30}

SOLUTION:

keys = ['Ten', 'Twenty', 'Thirty']

values = [10, 20, 30]

d={}

for key in keys:

for value in values:

d[key]=value

print(d)

# Day -2 MySQL Assessment

### Question 1:

Create table the below two tables with proper MySQL datatypes and use primary and foreign key references (user\_master's city\_id will be the primary key of city\_master's id column)

1. user\_master

- id

- name

- contact\_number

- email\_id

- blood\_group

- city\_id

- added\_date

2. city\_master

- id

- city\_name

- city\_state

- added\_date

### Question 2:

Insert 30 records into the user\_master table and 5 records in the city\_master table

### Question 3:

Select both table's all records using mysql join

Where you should use,

- where clause

- limit, offset

- like

- order by

### Question 4:

Update the user\_master's even ID column records using the update clause, where the name of the user should be updated as "updated\_existing\_name”

e.g

- If the ID of the employee is 10 name is "John" then the output name should be

- updated\_John

### Question 5:

Delete all users where the email\_id of the employee contains the keyword "Gmail"