Python interview questions

1. Index = [‘python’, ‘C++’, ‘scala’]

Write a piece of code that will extract both index position and its corresponding value too for all the items in in Index

Solution :

for i in range(len(Index)):

value = Index[i]

print("Value of item is "+ value)

index = Index.index(str(value))

print("Index of item is " + str(index))

1. Given an integer find the reverse of the integer. Integer can be negative or positive.

For example: input: 132 , output: 231

Input: -456, output: -654

Solution :

num = input();

num = str(num)

if num[0]=="-":

print('-' + num[-1:0:-1])

else:

print(num[::-1])

1. Given a string find the first non-repeating character in it and return its index. If it does not exist return -1. All the input strings are in lower case. For example: input: alphabet, output: 1, input: abracadabra, output: 4

Solution:

string = input()

string = str(string)

for i in range(len(string)):

var = 0

while(var<len(string)):

if (var!=i and string[i]==string[var]):

break

var = var+1

if var==len(string):

print(string.index(string[i]))

1. Given a non-empty string s, check if it’s a palindrome. Output should be a Boolean value say True or False

Solution:

inp = input()

inp = str(inp)

rev = inp[::-1]

if inp == rev:

print("True")

else:

print("False")

1. Given an array move all the 0 to the last and get # 12 to the first. For example:

array1 = [0,1,0,3,12]

array2 = [1,7,0,0,8,0,10,12,0,4]

ouput:

[12, 1, 3, 0, 0]  
[12, 1, 7, 8, 10, 4, 0, 0, 0, 0]

Solution: could not finish this

def pushNumbers(arr, n):

count = 0

for i in range(n):

if array1[i] != 0:

array1[count] = array1[i]

count+=1

while count < n:

array1[count] = 0

count += 1

array1 = [0,1,0,3,12]

n = len(array1)

pushNumbers(array1, n)

print(array1)

1. Given 2 sentences, identify the matched and mis-matched words with in the sentences and list as 2 different sets

Sample:

sentence1 = 'We are really pleased to meet you in our city'

sentence2 = 'The city was hit by a really heavy storm'

Output:  
(['The','We','a','are','by','heavy','hit','in','meet','our',  
'pleased','storm','to','was','you'])  
(['city', 'really'])

Solution:

def uncommon(a,b):

list\_a = a.split()

list\_b = b.split()

uc1 = ''

uc2 = ''

for i in list\_a:

if i not in list\_b:

uc1 = uc1+" "+i

for j in list\_b:

if j not in list\_a:

uc2 = uc2+" "+j

return uc1, uc2

def common(a,b):

list\_a = a.split()

list\_b = b.split()

uc1 = ''

uc2 = ''

for i in list\_a:

if i in list\_b:

uc1 = uc1+" "+i

for j in list\_b:

if j in list\_a:

uc2 = uc2+" "+j

return uc1, uc2

a = " We are really pleased to meet you in our city"

b = " The city was hit by a really heavy storm"

print(uncommon(a,b))

print(common(a,b))