**NAME: YOHENBA KSHETRIMAYUM**

**REG NO: RA1911003010904**

**WEEK: 2**

**Experiment Number:2**

**DATE: 11/2/2021**

**Aim: To solve allotted week 2(SET 13) python exercises**

1. Implement a Python program to sort a list of dictionaries using Lambda.

Original list of dictionaries :

[{'make': 'Nokia', 'model': 216, 'color': 'Black'}, {'make': 'Mi Max', 'model': '2', 'color': 'Gold'},

{'make': 'Samsung', 'model': 7, 'color': 'Blue'}]

Sorting the List of dictionaries :

[{'make': 'Nokia', 'model': 216, 'color': 'Black'}, {'make': 'Samsung', 'model': 7, 'color': 'Blue'},

{'make': 'Mi Max', 'model': '2', 'color': 'Gold'}]

dict = [{'make': 'Nokia', 'model': 216, 'color': 'Black'}, {'make': 'Mi Max', 'model': '2', 'color': 'Gold'},

{'make': 'Samsung', 'model': 7, 'color': 'Blue'}]

print("orignal: ")

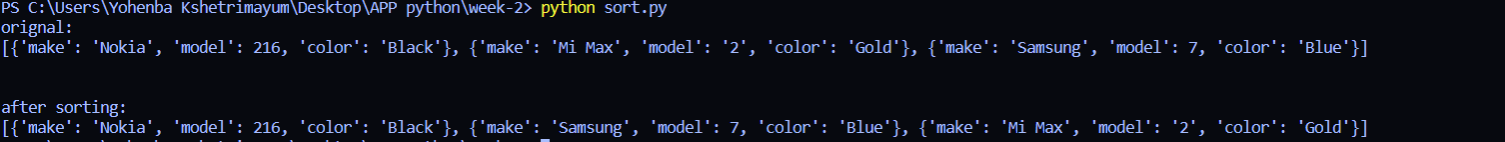
print(dict)

print("\n")

sort\_dict = sorted(dict, key = lambda x: x['color'])

print("after sorting: ")

print(sort\_dict)



2. Create a Python function that accepts a string and calculate the number of upper case letters

and lower case letters.

Sample String : 'The quick Brow Fox'

Expected Output :

No. of Upper case characters : 3

No. of Lower case Characters : 12

name = input("enter the sentence: ")

count\_upper= 0

cout\_lower=0

for i in range(len(name)):

if(name[i] != " "):

if(name[i].isupper()):

count\_upper += 1

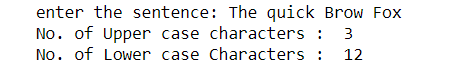
else:

cout\_lower +=1

print("No. of Upper case characters : ",count\_upper)

print("No. of Lower case Characters : ",cout\_lower)

**OUTPUT:-**



3. Write a Python program to move all zero digits to end of a given list of numbers.

Expected output:

Original list:

[3, 4, 0, 0, 0, 6, 2, 0, 6, 7, 6, 0, 0, 0, 9, 10, 7, 4, 4, 5, 3, 0, 0, 2, 9, 7, 1]

Move all zero digits to end of the said list of numbers:

[3, 4, 6, 2, 6, 7, 6, 9, 10, 7, 4, 4, 5, 3, 2, 9, 7, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0]

def shift\_zero(arr, n):

    count = 0

    for i in range(n):

        if arr[i] != 0:

            arr[count] = arr[i]

            count+=1

    while count<n:

        arr[count] = 0

        count+=1

arr = [3, 4, 0, 0, 0, 6, 2, 0, 6, 7, 6, 0, 0, 0, 9, 10, 7, 4, 4, 5, 3, 0, 0, 2, 9, 7, 1]

n = len(arr)

shift\_zero(arr,n)

print(arr)



4. Create a Python script to print a dictionary where the keys are numbers between 1 and 15

(both included) and the values are square of keys.

Sample Dictionary

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121, 12: 144, 13: 169, 14:

196, 15: 225}

a= []

b= []

for i in range(1,16):

    a.append(i)

    b.append(i\*i)

c = dict(zip(a,b))

print(c)



5. Write a Python program to find the numbers of a given string and store them in a list,

display the numbers which are bigger than the length of the list in sorted form. Use lambda

function to solve the problem.

Original string: sdf 23 safs8 5 sdfsd8 sdfs 56 21sfs 20 5

Numbers in sorted form:

20 23 56

str = "sdf 23 safs8 5 sdfsd8 sdfs 56 21sfs 20 5"

print("Original string: ",str)

str\_num=[i for i in str.split(' ')]

n = len(str\_num)

numbers=sorted([int(x) for x in str\_num if x.isdigit()])

print('Numbers in sorted form:')

for i in ((filter(lambda x:x>n,numbers))):

    print(i,end=' ')

