**Programming Assignment 12**

Q.1) Write a Python program to Extract Unique values dictionary values?

Ans.)

dict1 = {'k1': 1, 'k2': 1, 'k3': 'hello', 'k4': 'hello', 'k5':1234}

unique\_values = {i for i in dict1.values()}

unique\_values

Q.2) Write a Python program to find the sum of all items in a dictionary?

Ans.)

test\_dict = {'k1' : 89,

             'k2' : 111,

             'k3' : 123,

             'k4' : 5}

sum = 0

for i in test\_dict.values():

    sum +=sum + i

print("Sum of all values is : {}".format(sum))

Q.3) Write a Python program to Merging two Dictionaries?

Ans.)

dict1 = { 'x': 1, 'l': 2}

dict2 = { 'k': 3, 'z': 4, 'x': 11}

# merging dict2 into dict1

for item in dict2.items():

    dict1.setdefault(item[0], item[1])

print(dict1)

Q.4) Write a Python program to convert key-values list to flat dictionary?

Ans.)

test\_dict = {'month' : [1, 2, 3], 'name' : ['Jan', 'Feb', 'March']}

# Using dict() + zip() to convert key-values list to flat dictionary

res = dict(zip(test\_dict['month'], test\_dict['name']))

print("Flattened dictionary : " + str(res))

Q.5) Write a Python program to insertion at the beginning in OrderedDict?

Ans.)

from collections import OrderedDict

# initialising ordered\_dict

iniordered\_dict = OrderedDict([('Feb', '2'), ('Mar', '3')])

# inserting items in starting of dict

iniordered\_dict.update({'Jan':'1'})

iniordered\_dict.move\_to\_end('Jan', last = False)

# print result

print ("Ordered Dictionary after insertion : "+str(iniordered\_dict))

Q.6) Write a Python program to check order of character in string using OrderedDict()?

Ans.)

from collections import OrderedDict

def checkOrderofString(str, pattern):

    # create empty OrderedDict

    dict = OrderedDict.fromkeys(str)

    print(dict)

    ptrlen = 0

    for key,value in dict.items():

        if (key == pattern[ptrlen]):

            ptrlen = ptrlen + 1

        # check if we have traverse complete pattern string

        if (ptrlen == (len(pattern))):

            return 'true'

    # if we come out from for loop that means order was mismatched

    return 'false'

string = input("enter string : ")

pattern = input("Enter Pattern : ")

if checkOrderofString(string,pattern):

    print("Pattern matched")

else:

    print("Pattern not matched")

Q.7) Write a Python program to sort Python Dictionaries by Key or Value?

Ans.)

a = {'k1':2, 'k2':1, 'k3':3, '4':4 ,'6':6, 'key7':7}

#this will print a sorted list of the keys

print(sorted(a.keys()))

#this will print the sorted list with items.

print(sorted(a.items()))

#a = {1:2 ,2:1 ,4:3 ,3:4 ,6:5 ,5:6 }

print(sorted(a.values()))