**Assignment-12**

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

dict1 = {'A' : [1, 3, 5, 4],

'B' : [4, 6, 8, 10],

'C' : [6, 12, 4 ,8],

'D' : [5, 7, 2]}

print("The original dictionary is : " ,dict1)

# Using list comprehension, values() and sorted()

res = list(sorted({ele for val in dict1.values() for ele in val}))

# print result

print("The unique values list is : " , res)

1. **Write a Python program to find the sum of all items in a dictionary?**

dict1 = {'A' : [1, 3, 5, 4],

'B' : [4, 6, 8, 10],

'C' : [6, 12, 4 ,8],

'D' : [5, 7, 2]}

sum1=[]

for i in dict1.values():

sum1 = sum1 + i

a = sum(sum1)

print(a)

1. **Write a Python program to Merging two Dictionaries?**

dict1 = {'A' : [1, 3, 5, 4],

'B' : [4, 6, 8, 10],

'C' : [6, 12, 4 ,8],

'D' : [5, 7, 2]}

dict2 = { 'E' : [4, 88 , 9]}

dict3 = dict1.copy()

dict3.update(dict2)

print(dict3)

1. **Write a Python program to convert key-values list to flat dictionary?**

**Input:**

**dict =**

**{**

**'language' : ['python', 'java', 'c/c++', 'javascript'],**

**'year' : [1991, 1995, 1980, 1995]**

**}**

**Output:**

**flatDict : {'python' : 1991 , 'java' : 1995, 'c/c++' : 1980, 'javascript' : 1995}**

#zip() method to convert list into tuple list.

#dict() method to return a dictionary from the input values.

languages = {'language' : ['python', 'java', 'c/c++', 'javascript'], 'year' : [1991, 1995, 1980, 1995]}

# Printing original dictionary

print("dictionary languages : " + str(languages))

# Flattening dictionary

lang\_year = dict(zip(languages['language'], languages['year']))

# Printing Flattened dictionary

print("Flattened dictionary language : " + str(lang\_year))

1. **Write a Python program to insertion at the beginning in OrderedDict?**

**Ans:-**

**Demo:**

**Input: original\_dict = {1: 'a', 2: 'b', 3:'c'} item to be inserted (4, 'd')**

**Output: {4: 'd', 1: 'a', 2: 'b', 3: 'c'}**

**To execute this task we can use the following approaches:**

**Using concatenation operator (+) OR Using move\_to\_end() method**

from collections import OrderedDict

dic1 = OrderedDict([('A', '100'), ('B', '200'), ('C', '300')])

insrt = OrderedDict([("D", '400')])

final = OrderedDict(list(insrt.items()) + list(dic1.items()))

# print result

print ("Resultant Dictionary :")

print(final)

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

**Ans:-**

Input:

string = "engineers rock"

pattern = "egr";

Output: false

Explanation:

There are two 'e' after 'g' in the input string.

1. **Write a Python program to sort Python Dictionaries by Key or Value?**

**Ans:-**

# Creates a sorted dictionary (sorted by key)

from collections import OrderedDict

dict = {'ravi':'10','rajnish':'9','sanjeev':'15','yash':'2','suraj':'32'}

dict1 = OrderedDict(sorted(dict.items()))

print(dict1)