

Programming_Assingment12

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

In [2]:

```
test_dict = {'a': [1, 62, 7, 8],
             'b': [1, 11, 7, 5],
             'c': [1, 11, 10, 8],
             'd': [1, 2, 11, 8]}
```

```
lstSet = set([ele for val in test_dict.values() for ele in val])
print("unique value from dictionary values are : {}".format(lstSet))
```

unique value from dictionary values are : {1, 2, 5, 7, 8, 10, 11, 62}

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

In [4]:

```
test_dict = {'a': 10,
             'b': 11,
             'c': 13,
             'd': 65}
```

```
sum = 0
for i in test_dict.values():
    sum += sum + i
print("Sum of all items is : {}".format(sum))
Sum of all items is : 215
```

3. Write a Python program to Merging two Dictionaries?

In [6]:

```
a = {'x': 31, 'y': 23}
b = {'y': 33, 'z': 43}
c = a.copy()
c.update(b)
print("dict a : ", a)
print("Dict b : ", b)
print('updated dictionary : {}'.format(c))

dict a : {'x': 31, 'y': 23}
Dict b : {'y': 33, 'z': 43}
updated dictionary : {'x': 31, 'y': 33, 'z': 43}
```

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

In [9]:

```
test_dict = {'month' : [1, 2, 3],
             'name' : ['Jan', 'Feb', 'March']}

# printing original dictionary
print("The original dictionary is : " + str(test_dict))

# Convert key-values list to flat dictionary
# Using dict() + zip()
res = dict(zip(test_dict['month'], test_dict['name']))

# printing result
print("Flattened dictionary : " + str(res))

The original dictionary is : {'month': [1, 2, 3], 'name': ['Jan', 'Feb', 'March']}
Flattened dictionary : {1: 'Jan', 2: 'Feb', 3: 'March'}
```

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

In [10]:

```
# insertion of items in beginning of ordered dict
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))

Ordered Dictionary after insertion : OrderedDict([('Jan', '1'), ('Feb', '2'), ('Mar', '3')])
```

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

In [11]:

```
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")

enter string : akash
Enter Pattern : a
OrderedDict([('a', None), ('k', None), ('s', None), ('h', None)])
Pattern matched
```

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

In [12]:

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

[1, 2, 3, 4, 5, 6]
[(1, 2), (2, 1), (3, 4), (4, 3), (5, 6), (6, 5)]
```

In [13]:

```
a = {1:2 ,2:1 ,4:3 ,3:4 ,6:5 ,5:6 }
print(sorted(a.values()))
#this will print a sorted list of values.

[1, 2, 3, 4, 5, 6]
```