

1 Python Basic Programming Assignment 12

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

```
In [1]: 1 dict1 = {'A' : [1, 3, 5, 4],
2           'B' : [4, 6, 8, 10],
3           'C' : [6, 12, 4 ,8],
4           'D' : [5, 7, 2]}
5
6 print("The original dictionary is : " ,dict1)
7 result = list(sorted({ele for val in dict1.values() for ele in val}))
8 print("The unique values list is : " , result)
```

The original dictionary is : {'A': [1, 3, 5, 4], 'B': [4, 6, 8, 10], 'C': [6, 12, 4, 8], 'D': [5, 7, 2]}

The unique values list is : [1, 2, 3, 4, 5, 6, 7, 8, 10, 12]

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

```
In [3]: 1 dict={ 'x':455, 'y':223, 'z':300, 'p':908 }
2 print("Dictionary: ", dict)
3 print("sum: ",sum(dict.values()))
```

Dictionary: {'x': 455, 'y': 223, 'z': 300, 'p': 908}

sum: 1886

1.0.3 3. Write a Python program to Merging two Dictionaries?

```
In [4]: 1 dict_1 = {1: 'a', 2: 'b'}
2 dict_2 = {2: 'c', 4: 'd'}
3 print(dict_1 | dict_2)
```

{1: 'a', 2: 'c', 4: 'd'}

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

```
In [1]: 1 # Python program to convert key-value list to flat dictionary
2
3 # Printing original dictionary
4 languages = {'language' : ['python', 'java', 'c/c++', 'javascript'], 'year' : [1991, 1995, 1980, 1995]}
5
6 print("dictionary languages : " + str(languages))
7
8 # Flattening dictionary
9 lang_year = dict(zip(languages['language'], languages['year']))
10
11 # Printing Flattened dictionary
12 print("Flattened dictionary language : " + str(lang_year))
13
```

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

Flattened dictionary language : {'python': 1991, 'java': 1995, 'c/c++': 1980, 'javascript': 1995}

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

```
In [2]: 1 from collections import OrderedDict
2 def checkOrder(string, pattern):
3     dic = OrderedDict.fromkeys(string)
4     ptr = 0
5     for key,value in dic.items():
6         if (key == pattern[ptr]):
7             ptr = ptr + 1
8         if (ptr == (len(pattern))):
9             return 'True'
10    return 'False'
11
12 string = 'Study tonight'
13 pattern = 'stu'
14 print (checkOrder(string,pattern))
15
16 string2= 'Welcome'
17 pattern2= 'cm'
18 print (checkOrder(string2,pattern2))
```

False

True

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

```
In [4]: 1 myDict = {'rakesh': 10, 'rani': 9,
2           'sanjita': 15, 'yash': 2, 'mohan': 32}
3
4 myKeys = list(myDict.keys())
5 myKeys.sort()
6 sorted_dict = {i: myDict[i] for i in myKeys}
7
8 print(sorted_dict)
```

{'mohan': 32, 'rakesh': 10, 'rani': 9, 'sanjita': 15, 'yash': 2}