

Assignment 12 Solutions ¶

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

```
In [1]: in_dict = {1:'Rishikesh',2:'Badrinath',3:'Gangotri',4:'Yamunotri',5:'Kedarnath',6:'Tirupati',7:'Kedarnath'}
print(in_dict.values())
print(f'Unique Values: {list(set(in_dict.values()))}')

dict_values(['Rishikesh', 'Badrinath', 'Gangotri', 'Yamunotri', 'Kedarnath', 'Tirupati', 'Kedarnath'])
Unique Values: ['Badrinath', 'Gangotri', 'Kedarnath', 'Tirupati', 'Rishikesh', 'Yamunotri']
```

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

```
In [2]: in_dict = {'Apple':10,'Mango':20,'Banana':30,'Guava':40,'PineApple':200}
print('Sum of All items: ',sum(in_dict.values()))

Sum of All items: 300
```

3. Write a Python program to Merging two Dictionaries?

```
In [3]: course_details = {
        'course_name': 'Ineuron'
    }
instructors = {
    'course_instructors': ['Sudhanshu Kumar', 'Krish Naik']
}
course_details.update(instructors)
print(course_details)

{'course_name': 'Ineuron', 'course_instructors': ['Sudhanshu Kumar', 'Krish Naik']}
```

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

```
In [4]: in_list = [('A',10),('B',20),('C',30),('D',40),('E',50),('F',60),('G',70),('H',80),('I',90),('J',100)]

# Method #1
dict(in_list)

# Method #2
out_dict = {}
for ele in in_list:
    out_dict[ele[0]] = ele[1]
print(out_dict)

{'A': 10, 'B': 20, 'C': 30, 'D': 40, 'E': 50, 'F': 60, 'G': 70, 'H': 80, 'I': 90, 'J': 100}
```

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

```
In [5]: from collections import OrderedDict
dict_one = OrderedDict({'Apple':'Iphone','Microsoft':'Windows','Google':'chrome'})
print('dict_one',dict_one)
dict_two = {'Tesla':'SpaceX'}
dict_one.update(dict_two)
print('dict_one',dict_one)
dict_one.move_to_end('Tesla',last=False)
print('dict_one',dict_one)

dict_one OrderedDict([('Apple', 'Iphone'), ('Microsoft', 'Windows'), ('Google', 'chrome')])
dict_one OrderedDict([('Apple', 'Iphone'), ('Microsoft', 'Windows'), ('Google', 'chrome'), ('Tesla', 'SpaceX')])
dict_one OrderedDict([('Tesla', 'SpaceX'), ('Apple', 'Iphone'), ('Microsoft', 'Windows'), ('Google', 'chrome')])
```

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

```
In [6]: from collections import OrderedDict

initial_list = {'a': 1000, 'f': 200, 'd': 300, 'c': 400, 'b': 500, 'e': 600}
print(initial_list)

final_list = OrderedDict(dict(sorted(initial_list.items())))
print(final_list)

{'a': 1000, 'f': 200, 'd': 300, 'c': 400, 'b': 500, 'e': 600}
OrderedDict([('a', 1000), ('b', 500), ('c', 400), ('d', 300), ('e', 600), ('f', 200)])
```

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

```
In [7]: d_items = {'Mango':100,'PineApple':22,'Banana':60,'Grape':13}

def sort_dict(in_dict,sort_type):
    if sort_type == 'key':
        print(dict(sorted(in_dict.items(), key=lambda x:x[0], reverse=False)))
    else:
        print(dict(sorted(in_dict.items(), key=lambda x:x[1], reverse=False)))

sort_dict(d_items,'key')
sort_dict(d_items,'value')

{'Banana': 60, 'Grape': 13, 'Mango': 100, 'PineApple': 22}
{'Grape': 13, 'PineApple': 22, 'Banana': 60, 'Mango': 100}
```