

Assignment 12 Solutions

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

In [1]:

```
1 test_dict = {'a': [5, 6, 7, 8],
2             'b': [10, 11, 7, 5],
3             'h': [6, 12, 10, 8],
4             'i': [1, 2, 5]}
5
6 print("The original dictionary is : " + str(test_dict))
7 res = list(sorted({ele for val in test_dict.values() for ele in val}))
8 print("The unique values list is : " + str(res))
```

The original dictionary is : {'a': [5, 6, 7, 8], 'b': [10, 11, 7, 5], 'h': [6, 12, 10, 8], 'i': [1, 2, 5]}

The unique values list is : [1, 2, 5, 6, 7, 8, 10, 11, 12]

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

In [2]:

```
1 test_dict = {'a' : 6,
2             'b' : 11,
3             'c' : 14,
4             'd' : 7}
5
6 sum = 0
7 for i in test_dict.values():
8     sum += sum + i
9 print("Sun of all items is : {}".format(sum))
```

Sun of all items is : 127

3. Write a Python program to Merging two Dictionaries?

In [3]:

```
1 d1={'A':6,'B':2 , 'H':8}
2 d2={'C':3,'E':5}
3
4 d1.update(d2)
5 print("Concatenated dictionary is:")
6 print(d1)
```

Concatenated dictionary is:

{'A': 6, 'B': 2, 'H': 8, 'C': 3, 'E': 5}

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

In [4]:

```
1 test_dict = {'month' : [1, 2, 3],
2             'name' : ['Jan', 'Feb', 'March']}
3
4 print("The original dictionary is : " + str(test_dict))
5
6 res = dict(zip(test_dict['month'], test_dict['name']))
7 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 [5]:

```
1 # insertion of items in beginning of ordered dict
2 from collections import OrderedDict
3 iniordered_dict = OrderedDict([('Feb', '2'), ('Mar', '3')])
4
5 iniordered_dict.update({'Jan': '1'})
6 iniordered_dict.move_to_end('Jan', last = False)
7
8 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 [6]:

```
1 from collections import OrderedDict
2
3 initial_list = {'a': 100, 'f': 300, 'd': 400, 'c': 200, 'b': 800, 'e': 700}
4 print(initial_list)
5
6 final_list = OrderedDict(sorted(initial_list.items()))
7 print(final_list)
```

{'a': 100, 'f': 300, 'd': 400, 'c': 200, 'b': 800, 'e': 700}

OrderedDict([('a', 100), ('b', 800), ('c', 200), ('d', 400), ('e', 700), ('f', 300)])

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

In [7]:

```
1  # function calling
2  def dictionary():
3
4      # Declaring the hash function
5      key_value = {}
6
7      key_value[2] = 48
8      key_value[1] = 4
9      key_value[5] = 68
10     key_value[4] = 28
11     key_value[6] = 13
12     key_value[3] = 424
13
14     print("key_value",key_value)
15
16     print("Task 2:-\nKeys and Values sorted in",
17           "alphabetical order by the key ")
18
19
20     for i in sorted(key_value):
21         print((i, key_value[i]), end=" ")
22
23
24 def main():
25     dictionary()
26
27 if __name__ == "__main__":
28     main()
```

key_value {2: 48, 1: 4, 5: 68, 4: 28, 6: 13, 3: 424}

Task 2:-

Keys and Values sorted in alphabetical order by the key
(1, 4) (2, 48) (3, 424) (4, 28) (5, 68) (6, 13)