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

def extract\_unique\_values(dictionary):

unique\_values = set()

for value\_list in dictionary.values():

unique\_values.update(value\_list)

return list(unique\_values)

# Sample dictionary

input\_dict = {

'key1': [1, 2, 3],

'key2': [2, 3, 4],

'key3': [3, 4, 5]

}

unique\_values = extract\_unique\_values(input\_dict)

print("Unique values:")

print(unique\_values)

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

def sum\_dictionary\_items(dictionary):

total\_sum = 0

for value in dictionary.values():

if isinstance(value, (int, float)):

total\_sum += value

return total\_sum

# Sample dictionary

input\_dict = {

'item1': 10,

'item2': 20,

'item3': 30,

'item4': 'not a number',

'item5': 40.5

}

dictionary\_sum = sum\_dictionary\_items(input\_dict)

print("Sum of dictionary items:", dictionary\_sum)

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

dict1 = {'a': 1, 'b': 2}

dict2 = {'c': 3, 'd': 4}

dict1.update(dict2)

print(dict1)

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

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

key\_value\_list = [("key1", 1), ("key2", 2), ("key3", 3)]

flat\_dict = {key: value for key, value in key\_value\_list}

print(flat\_dict)

# Output: {'key1': 1, 'key2': 2, 'key3': 3}

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

from collections import OrderedDict

ordered\_dict = OrderedDict([('a', 1), ('b', 2), ('c', 3)])

# Inserting a new item at the beginning

ordered\_dict['new'] = 0

ordered\_dict.move\_to\_end('new', last=False)

print(ordered\_dict)

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

from collections import OrderedDict

def check\_order\_of\_characters(string, pattern):

ordered\_dict = OrderedDict.fromkeys(string)

pattern\_length = 0

for key in ordered\_dict:

if key == pattern[pattern\_length]:

pattern\_length += 1

if pattern\_length == len(pattern):

return True

return False

# Example usage

input\_string = "Hello World"

search\_pattern = "llo"

result = check\_order\_of\_characters(input\_string, search\_pattern)

if result:

print("The pattern is in order in the string.")

else:

print("The pattern is not in order in the string.")

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

# Define a dictionary

d = {'apple': 3, 'banana': 2, 'orange': 1, 'kiwi': 4}

# Sort the dictionary by keys and print it

sorted\_d\_keys = dict(sorted(d.items()))

print("Sorted by keys: ", sorted\_d\_keys)

# Sort the dictionary by values and print it

sorted\_d\_values = dict(sorted(d.items(), key=lambda x: x[1]))

print("Sorted by values: ", sorted\_d\_values)