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

def extract\_unique\_values(dictionary):

unique\_values = set()

for values in dictionary.values():

if isinstance(values, list):

unique\_values.update(values)

else:

unique\_values.add(values)

return list(unique\_values)

my\_dict = {'a': [1, 2, 3], 'b': [2, 3, 4], 'c': 5}

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

print("Unique values:", unique\_values)

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

def sum\_dictionary\_values(dictionary):

total = sum(dictionary.values())

return total

my\_dict = {'a': 10, 'b': 20, 'c': 30}

result = sum\_dictionary\_values(my\_dict)

print("Sum of dictionary values:", result)

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

def merge\_dictionaries(dict1, dict2):

merged\_dict = {\*\*dict1, \*\*dict2}

return merged\_dict

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

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

merged = merge\_dictionaries(dict1, dict2)

print("Merged dictionary:", merged)

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

def list\_to\_flat\_dict(key\_value\_list):

flat\_dict = dict(key\_value\_list)

return flat\_dict

key\_value\_list = [('a', 1), ('b', 2), ('c', 3)]

flat\_dictionary = list\_to\_flat\_dict(key\_value\_list)

print("Flat dictionary:", flat\_dictionary)

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

from collections import OrderedDict

def insert\_at\_beginning(ordered\_dict, key, value):

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

ordered\_dict[key] = value

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

insert\_at\_beginning(my\_ordered\_dict, 'd', 4)

print("OrderedDict after insertion at the beginning:", my\_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(input\_string, pattern):

char\_dict = OrderedDict.fromkeys(pattern, 0)

pattern\_index = 0

for char in input\_string:

if char in char\_dict:

char\_dict[char] += 1

if char == pattern[pattern\_index]:

pattern\_index += 1

if pattern\_index == len(pattern):

return True

return False

input\_string = "hello world"

pattern = "lo"

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

if result:

print("The characters in the pattern are in order in the string.")

else:

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

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

def sort\_dictionary\_by\_key(dictionary):

sorted\_dict = dict(sorted(dictionary.items()))

return sorted\_dict

def sort\_dictionary\_by\_value(dictionary):

sorted\_dict = dict(sorted(dictionary.items(), key=lambda item: item[1]))

return sorted\_dict

my\_dict = {'b': 3, 'a': 1, 'c': 2}

sorted\_by\_key = sort\_dictionary\_by\_key(my\_dict)

sorted\_by\_value = sort\_dictionary\_by\_value(my\_dict)

print("Dictionary sorted by key:", sorted\_by\_key)

print("Dictionary sorted by value:", sorted\_by\_value)