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

def extract\_unique\_values\_from\_dict(d):

unique\_values = set()

for value\_list in d.values():

for value in value\_list:

unique\_values.add(value)

return unique\_values

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

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

print("Unique values in the dictionary:", unique\_values)

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

def sum\_of\_items\_in\_dict(d):

total = sum(sum(value\_list) for value\_list in d.values())

return total

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

print("Sum of all items in the dictionary:", sum\_of\_items\_in\_dict(my\_dict))

1. Write a Python program to Merging two Dictionaries?

def merge\_dicts(dict1, dict2):

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

return merged\_dict

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

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

merged\_dict = merge\_dicts(dict1, dict2)

print("Merged dictionary:", merged\_dict)

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

def list\_to\_flat\_dict(keys, values):

flat\_dict = dict(zip(keys, values))

return flat\_dict

keys = ['a', 'b', 'c']

values = [1, 2, 3]

flat\_dict = list\_to\_flat\_dict(keys, values)

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

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

from collections import OrderedDict

def insert\_at\_beginning\_in\_ordered\_dict(od, key, value):

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

od[key] = value

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

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

print("OrderedDict after insertion at the beginning:", 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(s, pattern):

od = OrderedDict.fromkeys(pattern)

j = 0

for key in od:

if key not in s[j:]:

return False

j = s.index(key, j) + 1

return True

string = "hello world"

pattern = "hlo"

print("Does the pattern follow the order in the string?", check\_order\_of\_characters(string, pattern))

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

def sort\_dict\_by\_key(d):

return {k: d[k] for k in sorted(d)}

def sort\_dict\_by\_value(d):

return {k: v for k, v in sorted(d.items(), key=lambda item: item[1])}

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

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

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

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

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