PYTHON LAB 7

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Q-1

dict1 = {'a': 1, 'b': 2} dict2 = {'c': 3, 'd': 4} dict3 = {'e': 5, 'f': 6} dict4 = {\*\*dict1, \*\*dict2, \*\*dict3} print("Concatenated Dic onary:", dict4)

OUTPUT:

Concatenated Dic onary: {'a': 1, 'b': 2, 'c': 3, 'd': 4, 'e': 5, 'f': 6} Q-2 def check\_empty(dic onary): if not dic onary:

return "The dic onary is empty."

else:

return "The dic onary is not empty." dict1 = {} dict2 = {'a': 1, 'b': 2}

print(check\_empty(dict1)) print(check\_empty(dict2)) OUTPUT:

The dic onary is empty.

The dic onary is not empty. Q-3 employees = {

101: [

{'roll\_no': 1, 'salary': 4000},

{'roll\_no': 2, 'salary': 5000},

{'roll\_no': 3, 'salary': 3000}

],

102: [

{'roll\_no': 4, 'salary': 6000},

{'roll\_no': 5, 'salary': 7000},

{'roll\_no': 6, 'salary': 5500}

],

103: [

{'roll\_no': 7, 'salary': 3500},

{'roll\_no': 8, 'salary': 4500},

{'roll\_no': 9, 'salary': 6500}

]

}

for dept\_no, employee\_list in employees.items():

min\_salary = min(employee\_list, key=lambda x: x['salary'])['salary'] max\_salary = max(employee\_list, key=lambda x: x['salary'])['salary']

print(f"Department {dept\_no}:") print(f" Minimum Salary: {min\_salary}") print(f" Maximum Salary: {max\_salary}")

print()

OUTPUT:

Department 101:

Minimum Salary: 3000 Maximum Salary: 5000 Department 102:

Minimum Salary: 5500 Maximum Salary: 7000 Department 103:

Minimum Salary: 3500

Maximum Salary: 6500

Q-4 def character\_frequency(input\_string):

freq\_dict = {}

for char in input\_string: if char in freq\_dict: freq\_dict[char] += 1

else:

freq\_dict[char] = 1 return freq\_dict input\_string = input("Enter a string: ") freq\_dict = character\_frequency(input\_string) print("Character Frequency in the given string:") for char, freq in freq\_dict.items():

print(f"'{char}': {freq}")

OUTPUT:

Enter a string: tusjafdskjk

Character Frequency in the given string:

't': 1

'u': 1

's': 2

'j': 2

'a': 1

'f': 1

'd': 1

'k': 2

Q-5

prices = {

'apple': 2.5,

'banana': 1.2,

'orange': 3.0,

'milk': 1.5,

'bread': 2.0

}

quan es = {

'apple': 3,

'banana': 5,

'orange': 2,

'milk': 4,

'bread': 1

}

total\_bill = 0 for item, price in prices.items(): if item in quan es:

total\_bill += price \* quan es[item] print(f"The total bill is: ${total\_bill:.2f}")

OUTPUT:

The total bill is: $27.50