**Python Lab**

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A = (

    [1, 2, 3],

    [4, 5, 6],

    [7, 8, 9]

)

Sec = A[1][1]

print(Sec)

# python/Lab/Dic-Q1.py

# 5

Q2

A = ([ 1 , 2 , 3],

     [ 2 , 3 , 4],

     [ 3 , 4 , 5])

A [2][2] = 10

print(A)

# output

# python/Lab/Dic-Q2.py

# ([1, 2, 3], [2, 3, 4], [3, 4, 10])

Q3

def sums(tp):

    return [sum(lst) for lst in tp ]

A = ( [1, 2, 3] ,

      [4, 5, 6] ,

      [7, 8, 9])

result =sums(A)

print(result)

# output

# python/Lab/List-Q3

# [6, 15, 24]

Q4

A = (["Rohit" , " abhishek"],["Omkar" , "Adity"],["yash" , "Shabir"])

A[1][1] = "Abc"

print(A)

# output

# (['Rohit', ' abhishek'], ['Omkar', 'Abc'], ['yash', 'Shabir'])

Q5

def removeEle(TL):

    return tuple(lst[1:] for lst in TL)

A = ([1, 2, 3], [4, 5, 6], [7, 8, 9])

result = removeEle(A)

print(result)

 # Output: ([2, 3], [5, 6], [8, 9])

Q6

A = (10, [20, 30, 40], 50)

A[1].append(60)

new\_list = []

new\_list.append(A)

print(new\_list)

# output

# python/Lab/List-Q6.py

# [(10, [20, 30, 40, 60], 50)]

Q7

def sortS(TL):

    return tuple(sorted(lst) for lst in TL)

A= ([3, 1, 2], [9, 7, 8], [6, 5, 4])

result = sortS(A)

print(result)

# Output: ([1, 2, 3], [7, 8, 9], [4, 5, 6])

Q8

def sum\_inner\_tuples(tuple\_of\_tuples):

    return sum(sum(tpl) for tpl in tuple\_of\_tuples)

my\_tuple = [(1, 2), (3, 4), (5, 6)]

result = sum\_inner\_tuples(my\_tuple)

print(result)

# Output: 21

Lab – 13

my\_dict = {'name': 'Abhi', 'age': 25, 'city': 'pune'}

copy\_dict = my\_dict.copy()

print("Get 'name':", my\_dict.get('name'))

print("Get 'country' (not in dict):", my\_dict.get('country', 'Not Found'))

age = my\_dict.pop('age')

print("Popped 'age':", age)

print("Dictionary after pop:", my\_dict)

dict\_copy = my\_dict.copy()

print("Copied dictionary:", dict\_copy)

print("Keys:", my\_dict.keys())

print("Values:", my\_dict.values())

print("Items:", my\_dict.items())

copy\_dict.clear()

print("After clear():", copy\_dict)

# output

# Get 'name': Abhi

# Get 'country' (not in dict): Not Found

# Popped 'age': 25

# Dictionary after pop: {'name': 'Abhi', 'city': 'pune'}

# Copied dictionary: {'name': 'Abhi', 'city': 'pune'}

# Keys: dict\_keys(['name', 'city'])

# Values: dict\_values(['Abhi', 'pune'])

# Items: dict\_items([('name', 'Abhi'), ('city', 'pune')])

# After clear(): {}

Q14

students = {

    101: {'Roll Number': 1, 'Name': 'Abhi', 'Marks': 85},

    102: {'Roll Number': 2, 'Name': 'omkar', 'Marks': 78},

    103: {'Roll Number': 3, 'Name': 'Charlie', 'Marks': 92}

}

def display\_student\_info(admno):

    student = students.get(admno)

    if student:

        print(f"Admission Number: {admno}")

        print(f"Roll Number: {student['Roll Number']}")

        print(f"Name: {student['Name']}")

        print(f"Marks: {student['Marks']}")

    else:

        print("Student not found!")

adm\_no = int(input("Enter Admission Number to search: "))

display\_student\_info(adm\_no)