PYTHON LAB 8

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DIV : 2(E4)

Q-1 def convert\_to\_uppercase(word\_list):

uppercased\_set = {word.upper() for word in word\_list} return uppercased\_set

words = ["hello", "world", "python", "programming", "hello"]

result = convert\_to\_uppercase(words) print(result)

OUTPUT:

{'PYTHON', 'PROGRAMMING', 'WORLD', 'HELLO'} Q-2 import random random\_numbers = set() while len(random\_numbers) < 10:

random\_numbers.add(random.randint(15, 45)) count\_less\_than\_30 = 0 for num in random\_numbers:

if num < 30:

count\_less\_than\_30 += 1 random\_numbers = {num for num in random\_numbers if num <= 35} print("Random numbers (a er dele ng numbers greater than 35):", random\_numbers) print("Count of numbers less than 30:", count\_less\_than\_30)

OUTPUT:

Random numbers (a er dele ng numbers greater than 35): {32, 33, 15, 18, 22, 26, 28}

Count of numbers less than 30: 5

Q-3

names\_set = set() names\_set.add("TUSHAR") names\_set.add("lavkesh") names\_set.add("dhruv") names\_set.add("mihir") names\_set.add("nikhil") if "mihir" in names\_set:

names\_set.remove("mihir") names\_set.add("subham") names\_set.discard("mihir") names\_set.discard("lavkesh") print("Final set of names:", names\_set)

OUTPUT:

Final set of names: {'nikhil', 'dhruv', 'subham', 'TUSHAR'} Q-4 names\_set = {"Bhavik","Abhishekh","Amrut","Bhavdeep","Ashutosh"} names\_star ng\_with\_A = set() names\_star ng\_with\_B = set() for name in names\_set: if name.startswith("A"): names\_star ng\_with\_A.add(name) elif name.startswith("B"):

names\_star ng\_with\_B.add(name) print("Names star ng with A:", names\_star ng\_with\_A) print("Names star ng with B:", names\_star ng\_with\_B) OUTPUT:

Names star ng with A: {'Abhishekh', 'Amrut', 'Ashutosh'}

Names star ng with B: {'Bhavdeep', 'Bhavik'}