

Assignment 5

I = [1, 2, 35, 67, {"a": 45, "b": 78, "c": {90, 20, 45}}, (12, "prachi", 9022), {67, "Anand", 89}, [12, "r",

909]] Use the above list and solve the below

Question 1:

Print each element of the list using a for loop.

Hint: Your output should display each item on a new line.

Question 2:

Identify the type of each element in the list.

Hint: Use a for loop to iterate through the list and print the type of each element.

Question 3:

Extract and print all integers from the list using a for loop.

Hint: You may need to check for integers inside nested structures (like dictionaries and sets).

Question 4:

Find and print all string values inside the list using a for loop.

Hint: Be sure to account for strings inside tuples, dictionaries, and lists.

Question 5:

Print only the dictionary key-value pairs from the list.

Hint: Write a for loop to identify the dictionary in the list and print its keys and corresponding values.

Question 6:

Extract and print all unique values from the set found inside the dictionary in the

list. Hint: Use a for loop to navigate to the set and print each value.

Question 7:

Flatten and print all elements in the list (including nested elements).

Hint: Use a for loop to print every single element inside the list, regardless of whether it is inside another list, dictionary, tuple, or set.

Question 8:

Count how many times a certain data type (e.g., integer, string) appears in the list.

Hint: Use a for loop to count and print how many integers and strings exist in the list, including inside nested structures.

Question 9:

Add 10 to each integer found in the list.

Hint: Use a for loop to go through the list and, if an integer is found, add 10 to it and print the result.

Question 10:

Write a program that prints elements from the set found inside the dictionary, but only if the value is greater than 30.

Hint: Use a for loop to identify and filter values from the set.