FOCUS LEARNING

Name:_____
Date:_____

Python OOP Week 3 HW

Question 1

Given a 1D list of alternating names and ages, convert the list into a dictionary. Print the dictionary in the end.
You are given this list →[“Bob”, 5, “James”, 6, “Kate”, 10]. Your code should be turned into {“Bob”: 5, “James”: 6, “Kate”: 10}.

Question 2.

Given a dictionary containing names to ages, find out and print how many people are less than 10 years old.
The dictionary you are given is {“Bob”: 5, “James”: 6, “Kate”: 10, “John”: 20, “Tony”: 2}

names_to_ages = {“Bob”: 5, “James”: 6, “Kate”: 10, “John”: 20}
num_of_young_people = 0
Below here you should use a for loop to go over the dictionary and count how many people have an age less than 10.

Question 3

Given a 1D list of numbers, remove all the duplicate numbers from the list and print the new list that does not have duplicates.
For if you have [1, 1, 2, 2, 3, 4, 5, 4] then the new list should be [1, 2, 3, 4, 5]
You are given the following list [2, 5, 1, 6, 5, 4, 3, 2, 3, 7, 8, 9, 0, 1, 2, 6]. Please write code to remove the duplicates.

Question 4

Given a credit card number is valid if it contains exactly 3 number “5”s and no more than 1 number “0”s. Write some code that prints whether or not a credit card number is valid.
Here is the credit card number credit_card_number = “55238695730”