



Module 1: Case Study - 2

Problem Statement:

Consider yourself to be Sam who is a data scientist. He has been invited as a guest lecturer at a college to take an introductory session on Python.

Tasks To Be Performed:

1. Create 1st tuple with values -> (10, 20, 30), 2nd tuple with values -> (40, 50, 60):
 - a. Concatenate the two tuples and store it in "t_combine"
 - b. Repeat the elements of "t_combine" 3 times
 - c. Access the 3rd element from "t_combine"
 - d. Access the first three elements from "t_combine"
 - e. Access the last three elements from "t_combine"
2. Create a list 'my_list' with these elements:
 - a. First element is a tuple with values 1, 2, 3
 - b. Second element is a tuple with values "a", "b", "c"
 - c. Third element is a tuple with values True, False
3. Append a new tuple – (1, 'a', True) to 'my_list':
 - a. Append a new list – ["sparta", 123] to my_list
4. Create a dictionary 'fruit' where:
 - a. The first key is 'Fruit' and the values are ("Apple", "Banana", "Mango", "Guava")
 - b. The second key is 'Cost' and the values are (85, 54, 120, 70)
 - c. Extract all the keys from 'fruit'
 - d. Extract all the values from 'fruit'
5. Create a set named 'my_set' with values (1, 1, "a", "a", True, True) and print the result.