**Assignment 05: Python Crash Course Practice (Chapters 1–4)**

📘 Based on *Python Crash Course* by Eric Matthes – Chapters 1 to 4

**Important Note**

You are required to use only the concepts covered in the first four chapters of the book to complete this assignment. Solutions that involve advanced concepts beyond this scope will receive zero marks. The following topics have been covered so far:

* print() statement
* Variables
* Strings
* Integers
* Floats
* Lists
* Tuples
* for loops

**Question 01. Palindrome Check**

* Write a program that takes a string input from the user and prints whether it is a palindrome (a string that reads the same forwards and backwards). Test the code with twi cases one where the input string is a palindrome and the other where it is not a palindrome.

**Question 02. Formatted Table**

* Create a list of tuples where each tuple contains an item name (string) and its price (float).First print the list and then Use a for loop to print each item and its price along with serial number, aligned using the tab escape character.

**Question 03. Vowel Counter**

* Given a string sentence, write a program that counts and print how many vowels it contains.
  + print the original string
  + print the count of vowels

**Question 04. Discount Calculator**

* You have a list of product prices (floats), e.g. [19.99, 5.50, 100.0]. Apply a 15% discount to each price and store the new prices in a separate list. Then print original list, discounted list and each original and discounted price side by side.

**Question 05. Phone Number Formatter**

* You have a list of 11-digit strings like ["03123456789", "03001234567"]. Convert each into the format "+92-XXX-XXXXXXX" and print them. Print Original and Formatted number side by side.

**Question 06. Score Statistics**

* You have a tuple of exam scores, e.g. (72, 85, 91, 58, 76).
  + print the provided tuple
  + Convert it to a list and print it.
  + Compute and print the minimum, maximum, and average score.

**Question 07. Reverse Each Word in a Sentence**

* Given a sentence string, reverse each word individually but keep the word order.
  + print the original sentence
  + print the formatted sentence

**Question 08. Running Sum List**

* From a given list create a list where each element is the sum of all previous elements (inclusive). Print both the lists.

**Question 09. Interleave Two Lists**

* Combine two equal-length lists into a single one by alternating elements.
  + Input: [1, 2, 3] and ['a', 'b', 'c']
  + Output: [1, 'a', 2, 'b', 3, 'c']
* Print all three lists.

**Question 10. Repeat Letters**

* Given a string, return a new string where each letter is repeated twice. Print both the strings

**📤 Assignment Submission Guidelines**

Please follow these instructions carefully to submit your assignment:

1. ✅ **Complete All Questions** Make sure you attempt **all questions** from Q1 to the Q10.
2. 💻 **Run Each Code Cell** Ensure that each code block is executed and displays the correct output.
3. 📝 **Use Meaningful Inputs** When prompted for input (e.g., name, movie, numbers), use realistic and clear values.
4. 🚫 **Avoid Advanced Topics** Do **not** use:
   * if, else, or any conditional logic
   * while loops
   * Functions or libraries not taught yet

Only use the topics covered in Chapters 1–4:

1. 📁 **Save and Share Google Colab Link**
2. 📩 **Submit to Google Classroom**