Instructions:

1. Complete all tasks diligently.
2. Ensure your code is well-indented and commented for clarity.
3. Save your work in a single Python script named yourname_python_assignment.py. and send a github link
4. Submit your assignment by **Sunday 3PM**

1: Data Types and Variables

Write a Python program that stores and displays personal information. Define and store a person's:

- Name (string)
- Age (integer)
- Height in meters (float)
- Student status (boolean)

Use f-strings to format and print all these values in a structured manner.

2: Conditionals (if-elif-else)

Write a program that implements a cinema's ticket pricing system based on age groups.

The program should accept a user's age as input and print the appropriate ticket price using conditional statements.

The pricing should follow this structure:

- Free entry for children under five years
- $10 for those between 5 and 17 years
- $15 for adults between 18 and 60 years
- $12 for seniors above 60 years

3: Loops (for, while)

1. Write a Python program that generates a multiplication table for a user-provided number, displaying results up to 10 times the input number.

   Modify the program to allow the user to specify the upper limit of the table.

2. Write a program that calculates the sum of even numbers from 1 to 100 using a loop.

3. Develop a password validation system that continuously prompts the user for a password until they enter one that meets the following criteria:
    - At least 8 characters long
    - Containing at least one digit
    - Containing at least one uppercase letter

4: Data Structures

1. Create a dictionary that stores student names as keys and their grades as values.

   Allow users to:

    a. Add a new student and grade.
    b. Update an existing grade.
    c. Display all stored student records.
2. Implement a program that collects five unique numbers from the user using a set.

   If a duplicate number is entered, the program should prompt the user to try again.

Submit your assignment to dataanalysis@luxdevhq.com and copy breebridgit5@gmail.com and petergatitu61@gmail.com by Sunday 3PM