Computer Programming: Assignment (15%):

🚫Please read the instructions carefully. Any form of deviation from these rules will not be tolerated.👇👇

- ***Rules:-***

  - Solve each problem independently.
    - No module imports or built-in functions like **min()**, **max()**, **sum()**, etc.
    - Use only what you've learned in class so far.
    - Submit each problem as a separate **.py file**.
    - Compress all into a **.zip only** named: **ID_section.zip** and submit.

      ✅example: UGR/0000/17_section1.zip

- Submitting someone else's work as your own.
- Copying and pasting code from the internet or another student.
- Using any AI tools such as ChatGPT, to generate solutions.
- Plagiarism of any kind is strictly prohibited.

- **Deadline:-**
  - **Full Credit**: June 5, 2025 — 12:30 PM EAT.(***Click to Use the Google Form***)
  - **Reduced Credit**: June 7, 2025 - 12:30 PM EAT. (2.5 mark deduction per day late)

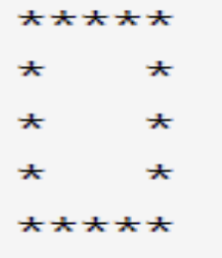
    (**Click to Use the Google Form**)

1) **Lucky Number Detector(1 marks) A number is lucky if it is divisible by 7 or ends with the digit 7.**
   - Write a function that returns True if a number is lucky.
   - Read an integer and print whether it's lucky or not.
2) **Sum Until Stop(3 marks) Repeatedly ask the user for numbers until they type stop.Print the total sum of the numbers entered.**
   - Use only while loops and conditionals.
   - Handle invalid (non-numeric) inputs gracefully using a check before converting.

3) **Hollow Square (3 marks)**

   Print a hollow square of stars using nested for loops. The user provides the size n (n ≥3), which represents both the height and width of the square.

   Example for n = 5:



   - Use only while loops and conditionals.
   - Handle invalid (non-numeric) inputs gracefully using a check before converting.

4) **Password Validator(3 marks) Ask the user to enter a password. Check and print "Valid"**

   if:
   - It's at least 6 characters long
   - It has no spaces
   - It contains at least one digit (hint: use a loop to check each character) Otherwise, print "Invalid"

5) **Exercise from the Worksheet: (5 marks)**
   - Choose any 3 questions from the loop section (Questions 9 to 14).
   - Create one folder for this exercise and:
     ➔ Include the implementation and **<u>screenshots</u>** of your results.