**📝 Day 5 – Home Assignments: Loops in Python**

**🔹 Part A: For Loops**

1. Write a program to print numbers from **1 to 10** using a for loop.
2. Print all **even numbers from 1 to 50**.
3. Print the **multiplication table** of a number (user input).

**🔹 Part B: While Loops**

1. Print numbers from **10 to 1** using a while loop (reverse counting).
2. Ask the user to enter a number, and keep asking until they enter a number greater than 100.

**🔹 Part C: Loop Control Statements**

1. Use a for loop to print numbers from 1 to 10, but **stop the loop** if the number is 7.
2. Use a for loop to print numbers from 1 to 10, but **skip** printing 5.

**🔹 Part D: Patterns with Loops**

1. Print the following right-angle triangle pattern using a for loop:

\*

\*\*\*

\*\*\*\*\*

\*\*\*\*\*\*\*

Take a number n as input and print a triangle with n rows using \*.

**🔹 Part E: Loop with Else**

1. Use a while loop to count from 1 to 5 and then print "Done Counting" using the else clause.
2. **Guess the Number Game**

* Set a secret number (e.g., 7)
* Let the user guess until they get it right
* Print "Too high" or "Too low" for wrong guesses
* Print "Correct!" when guessed

1. Print a square pattern using nested for loops:

\* \* \* \*

\* \* \* \*

\* \* \* \*

\* \* \* \*

1. Print a right-angled triangle (same as earlier) using nested loops:

\*

\*\*\*

\*\*\*\*\*

\*\*\*\*\*\*\*

14. Create a multiplication table from **1 to 5**, like:

1 x 1 = 1

1 x 2 = 2

...

5 x 10 = 50

1. Print a number triangle pattern like this (for n = 4):

1

1 2

1 2 3

1 2 3 4