Coding Challenges: Python Edition

1. Hello World

Write a Python program to print **"Hello, World!"** to the console.

2. Print Your Name

Write a program that prints your name to the print().

3. Print Name and Age on Separate Lines

Write a program to print your name and age on separate lines.Practice handling

multiple pieces of information using the **print()** function.

4. Declare and Use Different Data Types

Declare variables of different data types (**string, integer, float, boolean**) and

perform basic operations on them.

5. String Concatenation

Modify the program to print a message that combines your name and age in a

single line using string concatenation. Use **+, .format()**, or f-strings (**f"Hello, my name is**

{name} and I am {age} years old.").

6. Declare and Print Variables

Declare variables for your name and age, then print them.

7. Perform Mathematical Operations

Write a program that calculates and prints the result of all basic mathematical operations. Declare variables for the operands and perform **addition, subtraction, multiplication, and division**. Understand how Python handles numbers and mathematical expressions.

8. Declare and Print a List

Declare a **list of strings** and print each element.

9. Print a Simple Pattern

Write a program to print a simple pattern using asterisks:

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Use loops and structured output formatting to generate the pattern.

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10. Declare and Modify Variables

- Declare a variable **name** and assign it a string value.

- Declare a variable **age** and assign it an integer value.

- Declare a variable **is_student** and assign it a boolean value (**True** or **False**).

11. Print and Modify Variable Values

- Print the value of each variable to the console.

- Change the value of the **name** variable to another string.

- Increment the value of the **age** variable by 1.

- Toggle the value of **is_student** from **True** **to** **False** or vice versa.

    Practice updating and modifying stored values dynamically.

12. Store and Print Personal Details

Write a program to store and print the following details using separate variables:

- **name** (String)

- **age** (Integer)

- **dob** (Date of Birth - String or Date format)

- **height** (Float)

- **weight** (Float)

- **degree** (String)

- **gender** (String)