PYTHON HANDS-ON PRACTICE

Level 1: Very Basic (Input + Condition)

1. Write a program to take a number from the user and check whether it is **positive, negative, or zero**.
2. Ask the user to enter their **age** and check whether they are **eligible to vote**.
3. Take two numbers as input and print the **largest number**.
4. Ask the user to enter a number and check whether it is **even or odd**.
5. Take a character from the user and check whether it is a **vowel or consonant**.

Level 2: Input + Looping

6. Ask the user to enter a number **N** and print numbers from **1 to N** using a `for` loop.
7. Take a number from the user and print its **multiplication table** up to 10.
8. Ask the user to enter **N** and print the **sum of first N natural numbers**.
9. Take a number and count the **number of digits** using a `while` loop.
10. Ask the user to enter a number and **reverse it** using a loop.

Level 3: Input + Condition + Loop (Combined)

11. Ask the user to enter **N numbers** and print how many are **positive and negative**.
12. Take a number and check whether it is a **prime number**.
13. Ask the user to enter a number and print all **even numbers** from 1 to that number.
14. Take a number and find the **factorial** using a loop.
15. Ask the user to enter a number and check whether it is a **palindrome**.

Level 4: Real-World Style Logic

16. Ask the user to enter marks for **5 subjects** and calculate:

- Total marks
- Average
- Grade (A, B, C, Fail)

17. Create a **simple ATM program**:

- Ask for PIN
- Show menu (Balance, Withdraw, Deposit)
- Use loop until user exits

18. Ask the user to enter numbers repeatedly until they enter **0**, then print the **sum of all numbers**.
19. Ask the user to enter a number and print whether it is:

- Divisible by 3
- Divisible by 5
- Divisible by both

20. Create a **number guessing game** where:

- User guesses a number
- Program tells **Too High / Too Low**
- Loop continues until correct

Challenge Practice

21. Print a **pattern** using loops:

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22. Ask the user for a number and print its **Fibonacci series**.
23. Take a number and print all its **factors**.
24. Ask the user to enter a string and count **vowels and consonants**.
25. Create a menu-driven program using `while` loop:

    - Add
    - Subtract
    - Multiply
    - Exit