CODING TYPES: with base coding.

Python Basics:

1. Write a program that takes a sentence as input and prints the reverse of each word while keeping the word order intact. For example, if input is "Hello world", the output should be "olleH dlrow".

2. Create a program that generates a random password of a given length (user input), combining lowercase letters, uppercase letters, digits, and special characters.

3. Develop a program that takes a list of numbers as input and finds the second smallest and second largest numbers without sorting the list.

If-Else Statements:

4. Build a program that acts as a basic calculator. It takes two numbers and an operator (+, -, *, /) as input and performs the corresponding operation.

5. Write a program that prompts the user to enter their age and then tells them whether they're a minor, adult, or senior citizen according to predefined age ranges.

6. Create a program that simulates a simple ATM. It should allow the user to check balance, deposit, and withdraw money while ensuring they cannot withdraw more than their balance.

Loops:

7. Develop a program that generates the Fibonacci sequence up to a specified number of terms, given by the user.

8. Write a program that takes a string as input and prints all the permutations of its characters using a loop, without using any built-in permutation functions.

9. Implement a guessing game where the program generates a random number and the user has to guess it. Provide hints such as "too high" or "too low" to guide their guesses.

10. Build a program that generates a pattern based on user input, where the user specifies the number of rows. For example, if the user enters 5, the output should be:

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*
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***
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*****
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