**For loop**

**1️⃣ Understand the Syntax Clearly**

A for loop in Python is used for **iterating over a sequence** (like a list, tuple, string, or range).

**Basic Structure:**

for variable in sequence:

# Code block (loop body)

Example: Printing numbers from 1 to 5

for i in range(1, 6):

print(i)

**2️⃣ Start with Simple Exercises**

Try these beginner-friendly exercises:

✅ **Print numbers from 1 to 10**

for i in range(1, 11):

print(i)

✅ **Print even numbers from 2 to 20**

for i in range(2, 21, 2):

print(i)

✅ **Print characters of a string**

word = "Python"

for char in word:

print(char)

**3️⃣ Practice with Small Programs**

Solve problems like:  
🔹 Print the sum of numbers from 1 to 100.

total = 0

for i in range(1, 101):

total += i

print("Sum:", total)

🔹 Print multiplication table of a given number.

num = int(input("Enter a number: "))

for i in range(1, 11):

print(f"{num} x {i} = {num\*i}")

🔹 Reverse a string using a for loop.

word = "Python"

reverse = ""

for char in word:

reverse = char + reverse

print(reverse)

**4️⃣ Increase the Challenge Level**

Once you get comfortable, move to **nested loops, list comprehensions, and pattern problems** like:

🔹 **Star Pattern**

for i in range(1, 6):

print("\*" \* i)

**Output:**

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**5️⃣ Daily Coding Challenges**

🔹 Set a **daily goal** (solve at least 3 loop problems).  
🔹 Use platforms like **LeetCode, HackerRank, or W3Schools** for practice.  
🔹 Try to **explain your code** to yourself (it helps in understanding).

**6️⃣ Debug and Experiment**

If your code doesn’t work, **don’t give up!**  
🔸 Use print() to check variable values.  
🔸 Change parameters in range(), use different data types.  
🔸 Modify loops and observe what changes.

**7️⃣ Ask Yourself Questions**

🔹 What happens if I change the range step?  
🔹 Can I do the same task using a different loop structure?  
🔹 How can I write this using a list comprehension?

🔹 **Remember:** The more you practice, the easier loops will become! Try writing your own examples and share them with me—I’ll help you debug. 😊