LESSON_07 For Loops

OBJECTIVES

Students will be able to:

- Understand the structure and the syntax of the for loops.
- Understand how the range()function and the trace table method work

STANDARDS

7-8.CT.7, 7-8.CT.8

WARM-UP

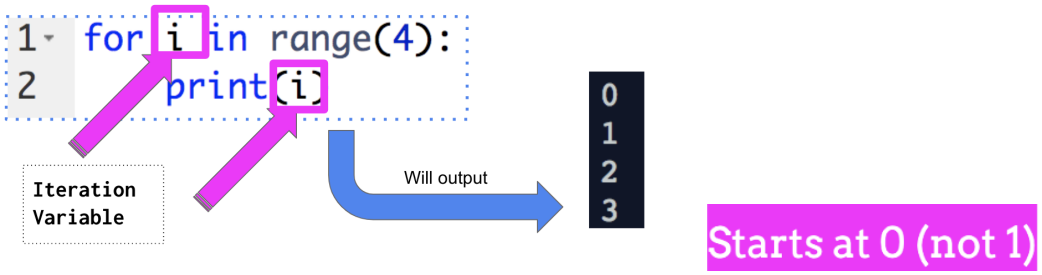
CODE PREDICTION

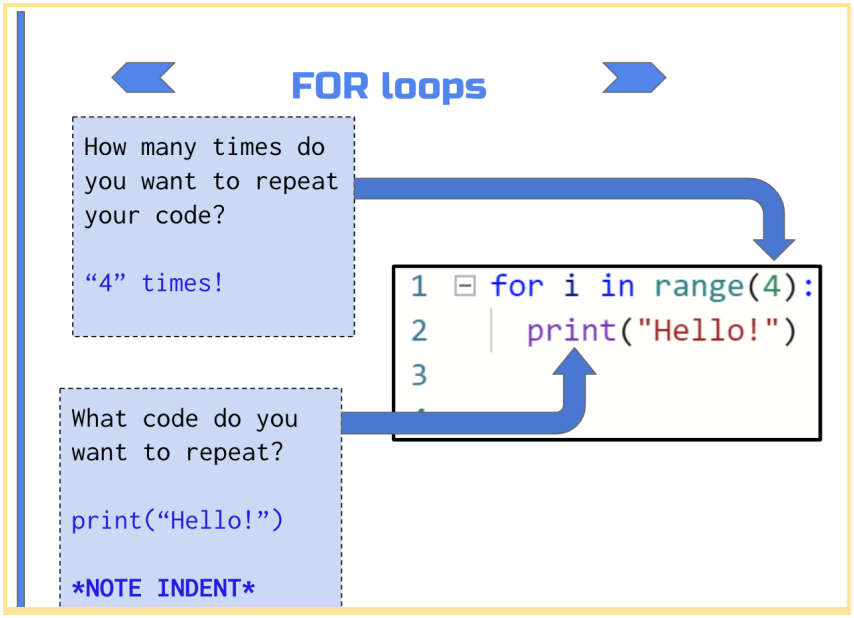
First: Make a prediction about what the following code will do.

```
1 for x in range(4):
2   print (x)
```

Then: Run the code on repl.it to see if you are correct.

WHOLE GROUP



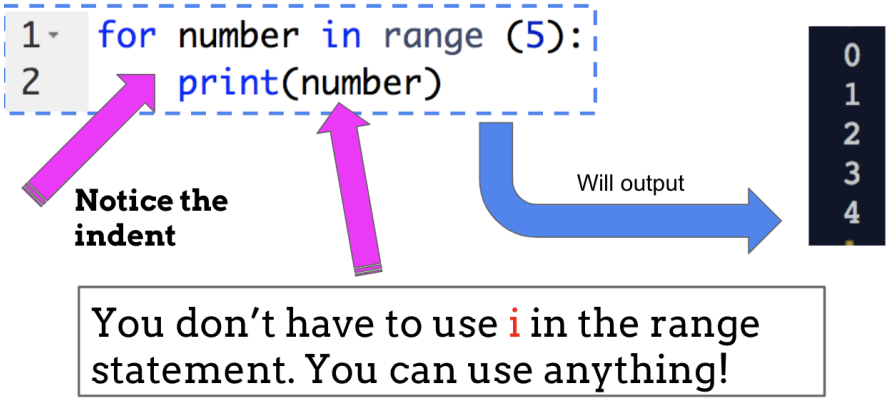


✔ CHECK FOR UNDERSTANDING_SCAFFOLDED QUESTIONS (WORK IN PAIRS)

➔ Run this code and answer the scaffolded questions built into the code.

WHOLE GROUP

INTRODUCE THE TRACE TABLE TO REINFORCE UNDERSTANDING



Trace Table for the above code

iteration variable (number)	Boundary condition range(5): 5 is exclusive, start is 0	output	Default Increment is 1
0	0 <5	0	0 + 1

1	1<5	1	1 + 1
2	2<5	2	2 + 1
3	3<5	3	3 + 1
4	4<5	4	4 + 1
5	5<5 false	STOP	

HOMEWORK_FORMATIVE ASSESSMENT

Write a program that Display "I will not cheat!" 20 times.

SUMMARY

BIG IDEA

- The range() function executes a group of statements for a specified number of times.
- When the for structure begins executing, the function range creates a sequence of values, which range from zero to 3. The first value in this sequence i