Loops in Python

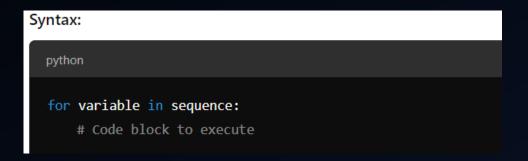
UNDERSTANDING OF LOOPS

What is a Loop?

- •A loop in Python allows for the execution of a block of code multiple times.
- Useful for automating repetitive tasks.
- •Types of loops: for loop and while loop.

The for Loop

• The for loop is used to iterate over a sequence (like a list, tuple, dictionary, set, or string).



```
fruits = ["apple", "banana", "cherry"]
for fruit in fruits:
    print(fruit)
```

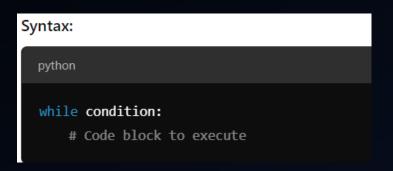
Range() function

 The range() function in Python is used to generate a sequence of numbers. It is commonly used in loops to iterate over a sequence of numbers.

range(start, stop, step)

The while Loop

The while loop continues to execute as long as the condition is True.



```
python

count = 1
while count <= 5:
    print(count)
    count += 1</pre>
```

break Statement

• The break statement is used to exit the loop even if the loop condition has not been met.

```
for number in range(10):
    if number == 5:
        break
    print(number)
```

continue Statement

 The continue statement skips the current iteration and moves to the next.

```
for number in range(10):
    if number % 2 == 0:
        continue
    print(number)
```

Thank You

HAPPY LEARNING!