

Understanding Looping Constructs

Instructor

Prashant Sahu

Manager (Data Science), Analytics Vidhya



Looping Constructs in Python

Looping Construct: Scenario

Jake wants to print his name 10 times.

Output:

Jake
Jake
Jake
Jake
Jake
Jake
Jake
Jake
Jake
Jake



```
print("Jake")  
print("Jake")  
print("Jake")  
print("Jake")  
print("Jake")  
print("Jake")  
print("Jake")  
print("Jake")  
print("Jake")  
print("Jake")
```

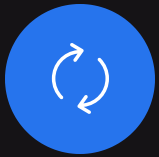
Manually, without using loops

OR

```
print ("Jake")
```

Using Loop

When Are Loops Needed?



Repetitive Tasks



Conditional Repetition



Simulations and Games

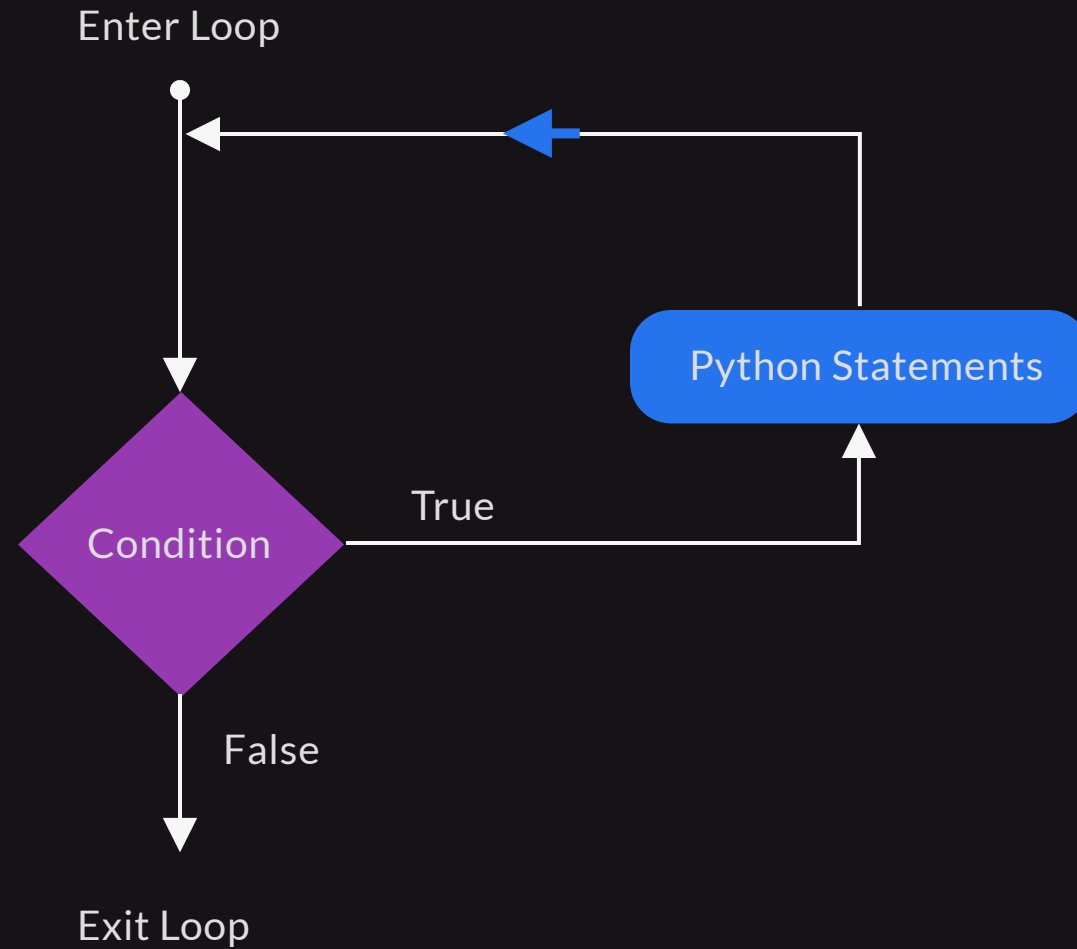


Iterative Over Data Structure



Processing User Input

Looping Construct in Python



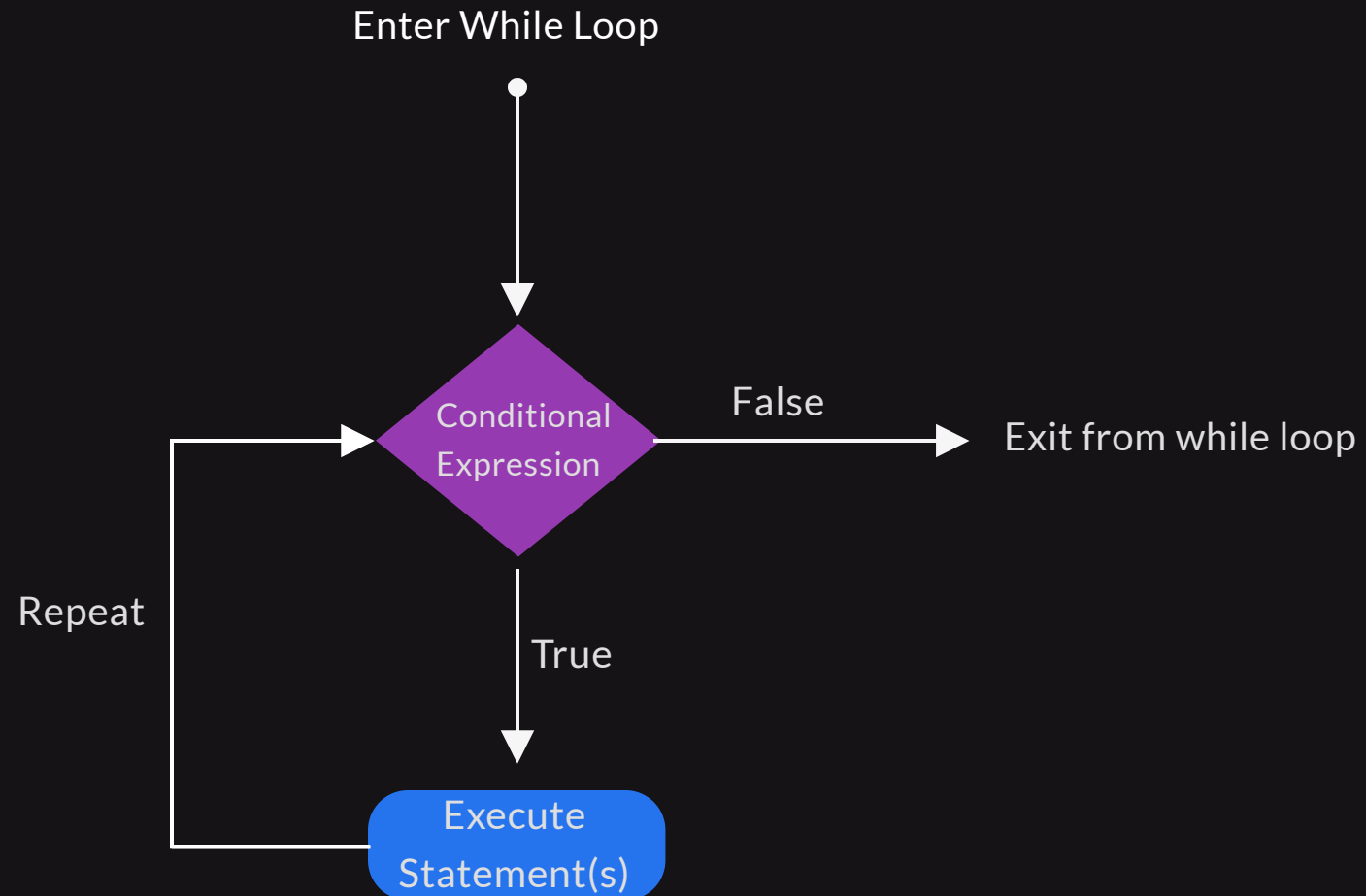
In Python, looping statements allow a block of statements (codes) to be repeated as long as some condition is met.

Types of Loop



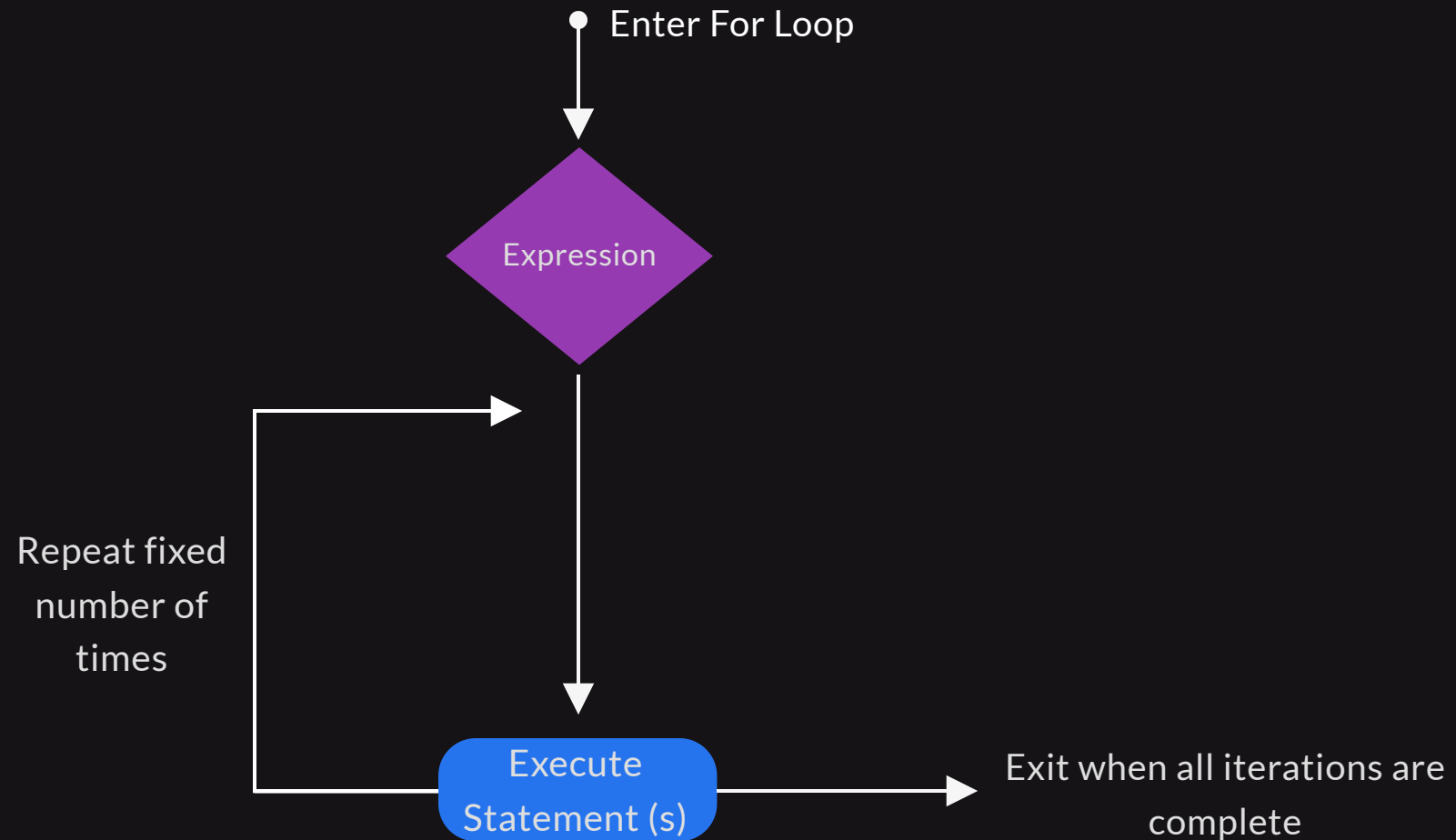
Looping Construct: While Loop

A **while** loop in Python is used to repeat a specific block of code an unknown number of times, until a condition is met.



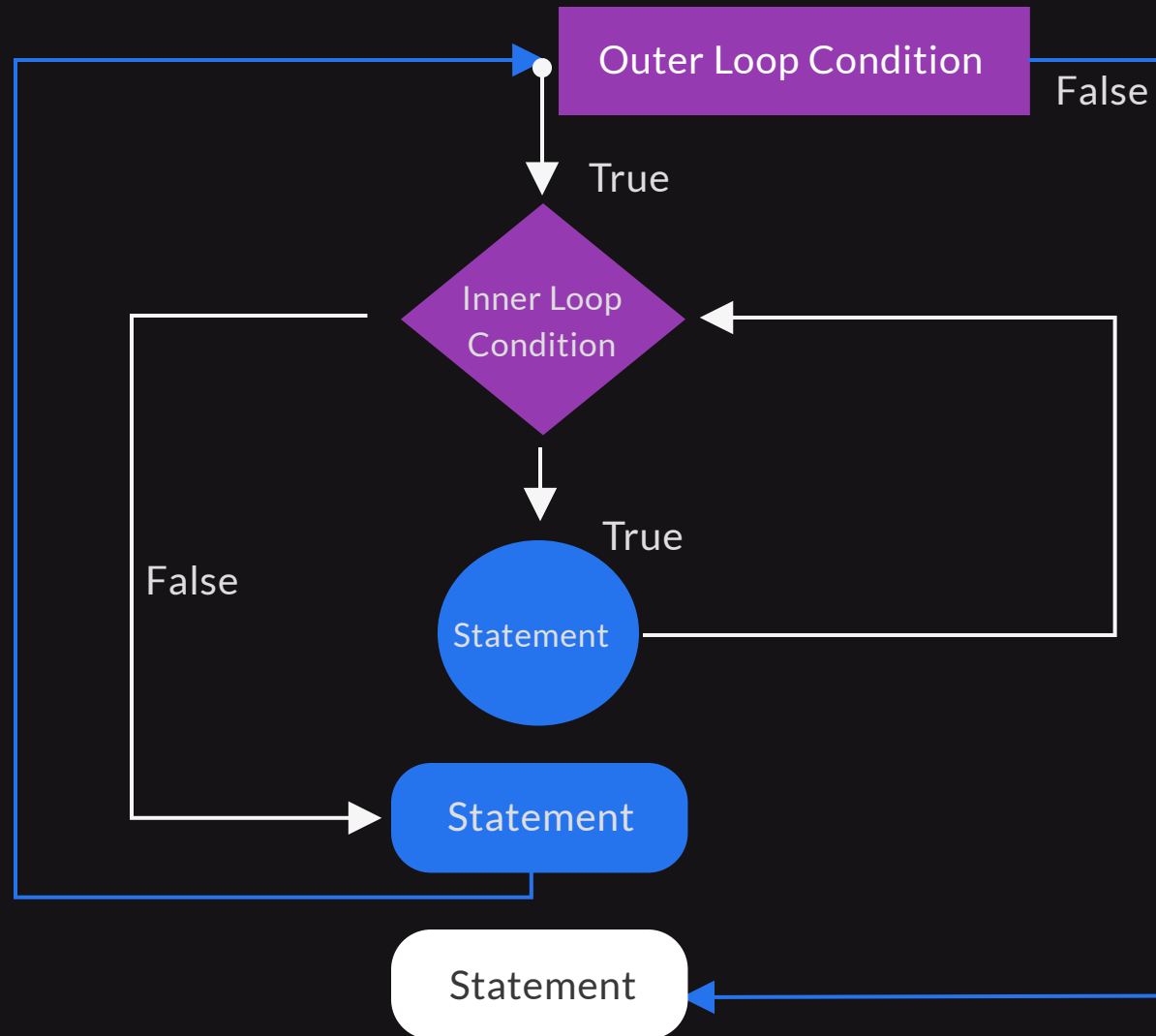
Looping Construct: For Loop

A **For** loop in Python is used for iterating over a sequence (that is either a list, a string, or a set).



Looping Construct: Nested Loop

A **Nested** loop has one or more loops within the body of another loop. The two loops are referred as inner loop and outer loop.



Hands on

Implementing Looping Construct in Python

Thank You
