

- The **while** loop can be applied to a program where the number of iterations is not known beforehand. The while loop keeps on executing the block of statement as long as the specified test condition evaluates to true.
- The **while** loop has four main components: Initialization, Condition, Loop body, and Step value.
- A **for** loop or a **while** loop can have an optional **else** block as well.
- The **else** part is executed if the loop terminates normally, i.e., if all the values in the sequence get used in a standard way without the loop being forcefully terminated.
- The **loop... else** statement is optional to be used in a program. The **else** block simply makes sure that the loop is terminated normally.

Brain DEVELOPER

A. Multiple Choice Questions:

- Iterative statement is also known as Looping statement.
 - Looping
 - Conditional
 - Selection
 - Sequential
- The for loop is used when we are sure about how many times a loop body will be executed.
 - while
 - for
 - while...else
 - while...not...else
- If the condition in a loop is false in the first step itself, we get No output.
 - No output
 - Infinite
 - Error
 - Normal
- The in operator checks whether a given value lies within a given set of values.
 - not in
 - between
 - range
 - in
- The while loop can be applied to a program where the number of iterations is not known beforehand.
 - while
 - while...else
 - for...not...else
 - for

B. Answer in one word:

- Mention the other name for Iterative statements.
Repetitive Statements and Looping Statement.
- Name the two types of Iterative statements.
For and While loop.
- Name the two membership operators in Python.
in and not in operators.
- Which function is used to check the range in a loop?
range()

C. Answer the following questions:

1. What do you mean by Iterative statements? Give examples.

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2. Why are **for** and **while** loops called entry controlled loops?

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3. What is the use of membership operators in Python?

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ACTIVITY SECTION



MY ACTIVITY

Perfection Through Practice

1. Rewrite the following code of statements after correcting the syntactical errors:

a. `a=integer(input("First num"))`

`b=10`

`for i in range(a:b):`

`PRINT(a*b)`

`if(a>b)then`

`print(a)`

b. `i=10`

`while(i=>5):`

`print(l)`

`i=i+1:`

2. Rewrite the following for loop program using the while loop:

`a=int(input("Enter the first number"))`

`b=int(input("Enter the second number"))`

`for i in range(a,b,3):`

`print(a*i)`

`print("Program Over")`