LUA - FOR LOOP

A **for** loop is a repetition control structure that allows you to efficiently write a loop that needs to execute a specific number of times.
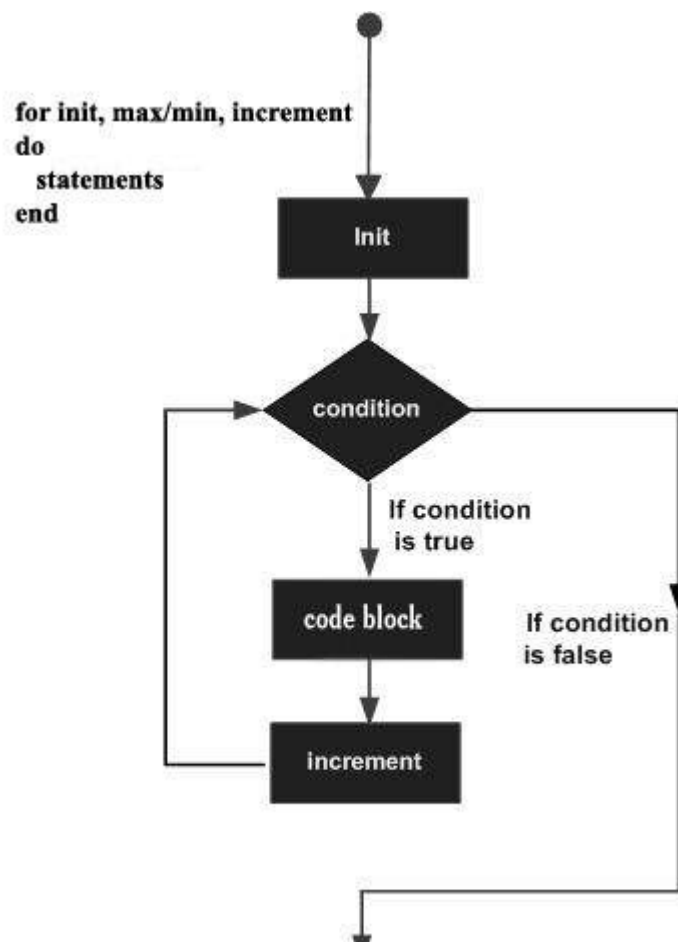
Syntax

The syntax of a **for** loop in Lua programming language is as follows −

```
for init,max/min value, increment
do
    statement(s)
end
```

Here is the flow of control in a **for** loop −

- The **init** step is executed first, and only once. This step allows you to declare and initialize any loop control variables.

- Next, the **max/min**. This is the maximum or minimum value till which the loop continues to execute. It creates a condition check internally to compare between the initial value and maximum/minimum value.

- After the body of the **for** loop executes, the flow of the control jumps back up to the **increment/decrement** statement. This statement allows you to update any loop control variables.

- The condition is now evaluated again. If it is true, the loop executes and the process repeats itself *bodyofloop*, *thenincrementstep*, *andthenagaincondition*. After the condition becomes false, the **for** loop terminates.

Flow Diagram

Example

```
for i=10,1,-1
do
   print(i)
end
```

When the above code is built and executed, it produces the following result −

```
10
9
8
7
6
5
4
3
2
1
```