

R for Loop (With Examples)



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Loops are used in programming to repeat a specific block of code. In this article, you will learn to create a for loop in R programming.

A for loop is used to iterate over a vector in R programming.

Syntax of for loop

```
for (val in sequence)
{
  statement
}
```

Here, **sequence** is a vector and **val** takes on each of its value during the loop. In each iteration, **statement** is evaluated.

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Flowchart of for loop

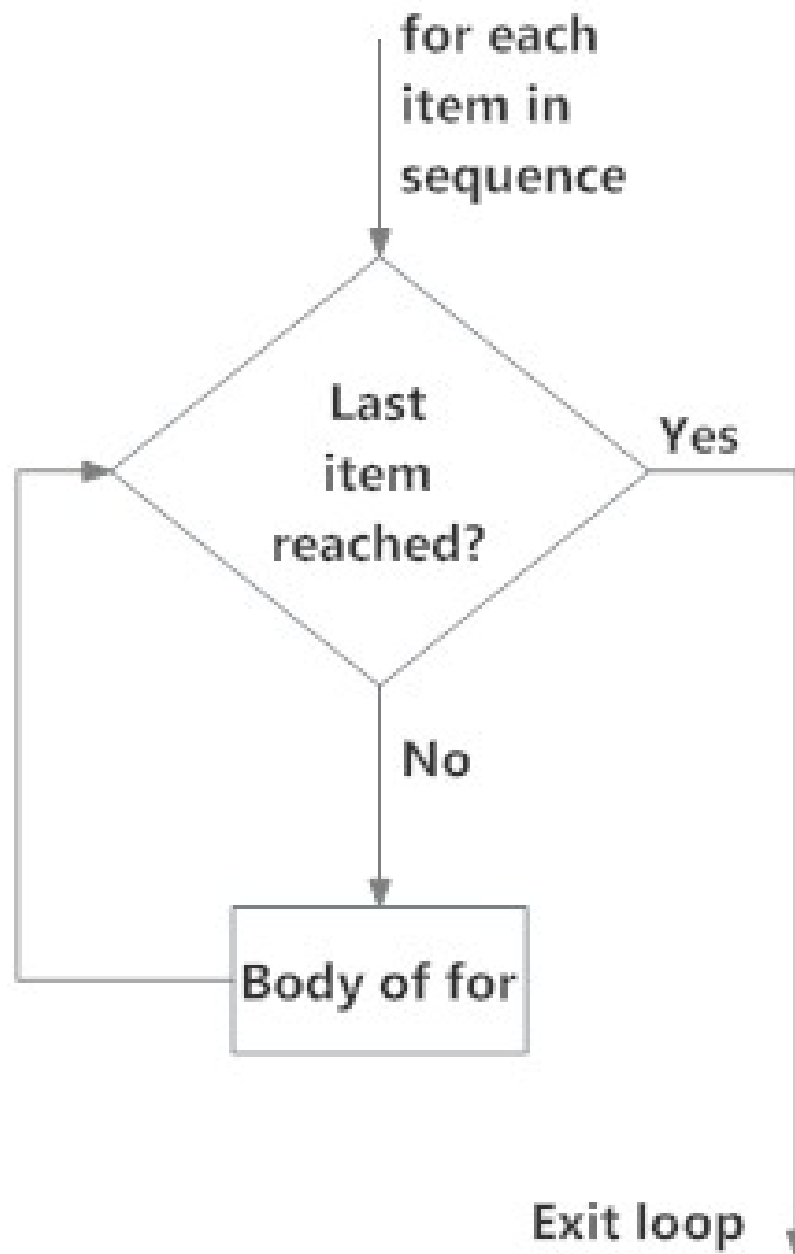


Fig: operation of for loop

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Example: for loop

Below is an example to count the number of even numbers in a vector.

```
x <- c(2,5,3,9,8,11,6)
count <- 0
for (val in x) {
  if(val %% 2 == 0) count = count+1
}
print(count)
```

Output

```
[1] 3
```

In the above example, the loop iterates 7 times as the vector `x` has 7 elements.

In each iteration, `val` takes on the value of corresponding element of `x`.

We have used a counter to count the number of even numbers in `x`. We can see that `x` contains 3 even numbers.

Check out these examples to learn more about for loop:

- Find the Factorial of a Number
- R Multiplication Table
- Check Prime Number