R if...else Statement (With Examples)

In this article, you will learn to create if and if...else statement in R programming with the help of examples.

Decision making is an important part of programming. This can be achieved in R programming using the conditional if...else statement.

R if statement

The syntax of if statement is:

```
if (test_expression) {
statement
}
```

If the test_expression is TRUE , the statement gets executed. But if it's FALSE , nothing happens.

Here, test_expression can be a logical or numeric vector, but only the first element is taken into consideration.

In the case of numeric vector, zero is taken as FALSE , rest as TRUE .

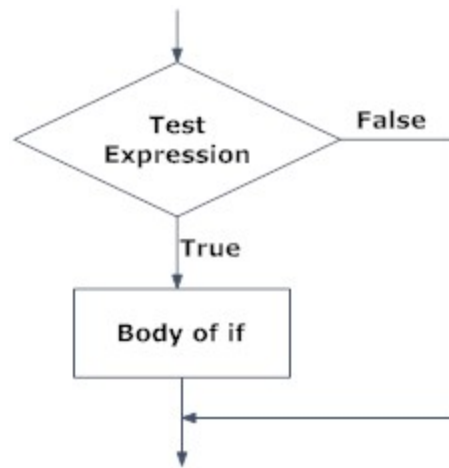# R if...else Statement (With Examples)

Flowchart of if statement

Fig: Operation of if statement

Example: if statement

Output

```
[1] "Positive number"
```

if...else statement

The syntax of if...else statement is:

```
if (test_expression) {
statement1
} else {
statement2
}
```

The else part is optional and is only evaluated if `test_expression` is `FALSE`.

It is important to note that else must be in the same line as the closing braces of the if statement.
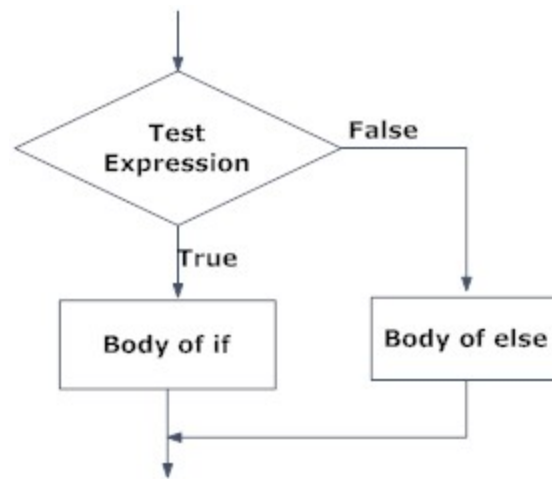
Flowchart of if...else statement

Fig: Operation of if...else statement

Example of if...else statement

Output

```
[1] "Negative number"
```

The above conditional can also be written in a single line as follows.

This feature of R allows us to write construct as shown below.

if...else Ladder

The if...else ladder (if...else...if) statement allows you execute a block of code among more than 2 alternatives

The syntax of if...else statement is:

```
if ( test_expression1) {
statement1
} else if ( test_expression2) {
statement2
} else if ( test_expression3) {
statement3
} else {
statement4
}
```

Only one statement will get executed depending upon the test_expressions.

Example of nested if...else

```
x <- 0
if (x < 0) {
print("Negative number")
} else if (x > 0) {
print("Positive number")
} else
print("Zero")
```

Output

```
[1] "Zero"
```

There is an easier way to use if...else statement specifically for vectors in R programming.

You can use ifelse() function instead; the vector equivalent form of the if...else statement.