Bash Until Loop Statement – Syntax and Examples

Bash Until Loop

Bash Until Loop is a loop statement used to execute a block of statements repeatedly based on the boolean result of an expression. The block of statements are executed until the expression returns true.

This might be little tricky. Let us understand this in much more detailed manner. When the expression evaluates to FALSE, the block of statements are executed iteratively. For the first time when the expression evaluates to TRUE, the loop is broken.

Syntax of Bash Until Loop

The syntax of until loop might look similar to that of bash while loop. But there is a difference in functionality

```
until [ expression ]; do
    statement(s)
done
```

The expression can contain only one condition. If the **expression should have multiple conditions**, the syntax is as follows :

```
until [[ expression ]]; do
    statement(s)
done
```

Example of bash until loop

Following is an until loop with only one condition in expression.

Bash Script File

```
#!/bin/bash

count=10
i=20
```

```
# until loop with single condition
until [ $i -lt $count ]; do
   echo "$i"
   let i--
done
```

When the above **until loop** script is run in terminal, we will get the following output.

Output

```
$ ./bash-until-loop-example
20
19
18
17
16
15
14
13
12
11
10
```

Example of bash until loop

Following is an until loop with only multiple conditions in expression.

Bash Script File

```
#!/bin/bash

count=10
a=20
b=16

# until loop for multiple conditions in expression
until [[ $a -lt $count || $b -lt count ]]; do
   echo "a : $a, b : $b"
   let a--
   let b--
done
```

When the above **until loop** script is run in terminal, we will get the following output.

Output

```
$ ./bash-until-loop-example-2
a : 20, b : 16
a : 19, b : 15
a : 18, b : 14
a : 17, b : 13
```

```
a : 16, b : 12
a : 15, b : 11
a : 14, b : 10
```

To realize looping in bash, we have bash for loop and bash while loop along with until loop statement.

Conclusion

In this Bash Tutorial – Bash Until Loop Statements, we have learnt about syntax of **until loop statement** in bash scripting for single and multiple conditions in expression with example scripts.

Bash Shell Scripting

- Bash Tutorial
- Bash Script Example
- Bash File Extension
- Bash Echo
- Bash Comments
- Bash Variable
- Bash Command Line Arguments
- Bash Read User Input
- Bash Read Password
- Bash Date Format
- Bash Sleep

Operators

- Bash Arithmetic Operators

Conditional Statements

- Bash If
- Bash If Else
- Bash Else If
- Bash Case

Loops

- ✦ Bash For Loop
- ✦ Bash While Loop
- ➪ **Bash Until Loop**

Strings

- ✦ Bash String Manipulation Examples
- ✦ Bash String Length
- ✦ Bash If String Equals
- ✦ Bash Split String
- ✦ Bash SubString
- ✦ Bash Concatenate String
- ✦ Bash Concatenate Variables to Strings

Functions

- ✦ Bash Function
- ✦ Bash Override Buitlin Commands

Arrays

- ✦ Bash Array

Files

- ✦ Bash Write to File
- ✦ Bash Read File
- ✦ Bash Read File line by line
- ✦ Bash If File Exists
- ✦ Bash If File is Directory
- ✦ Bash If File is Readable

Bash Others

- ✦ Bash Check if variable is set