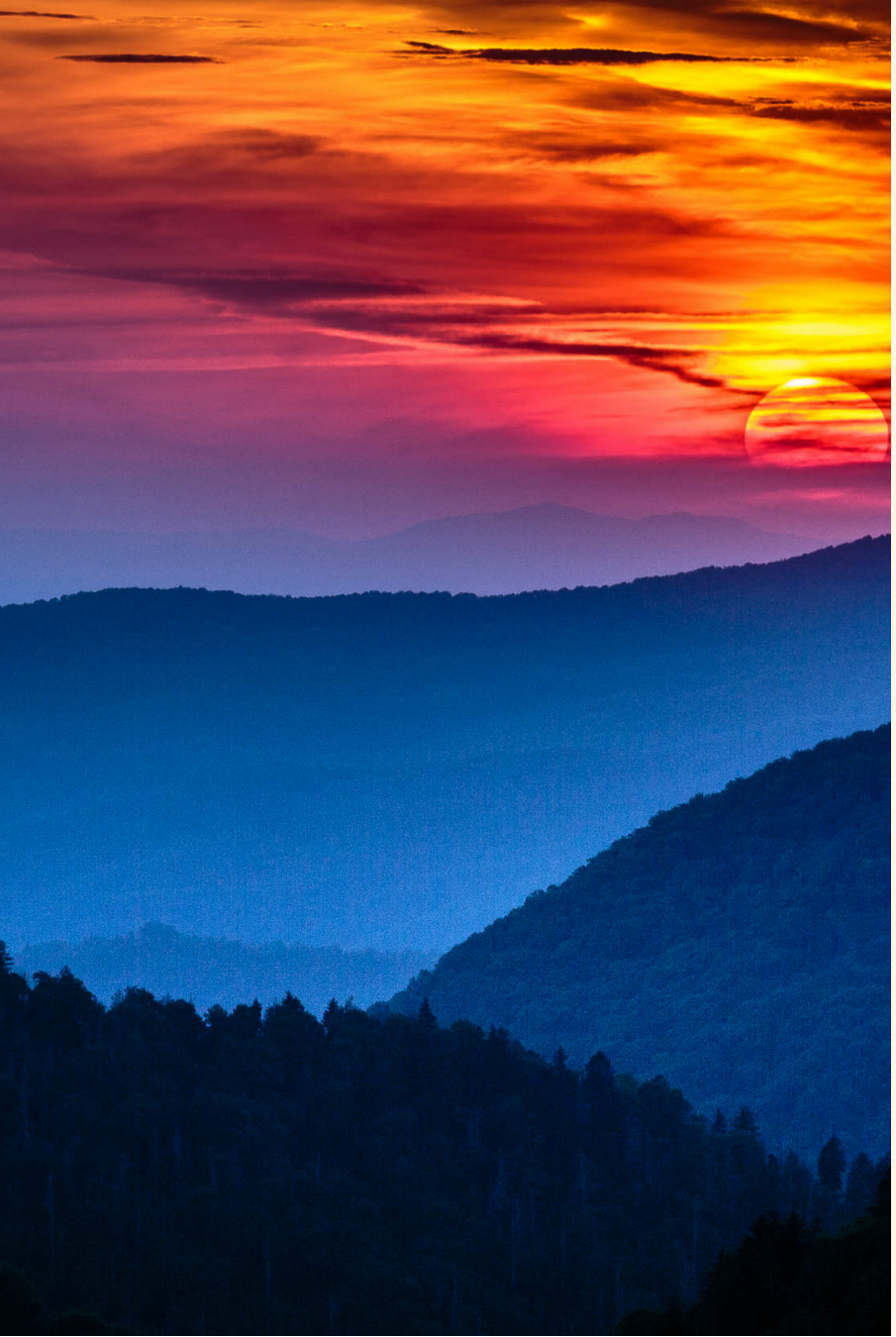
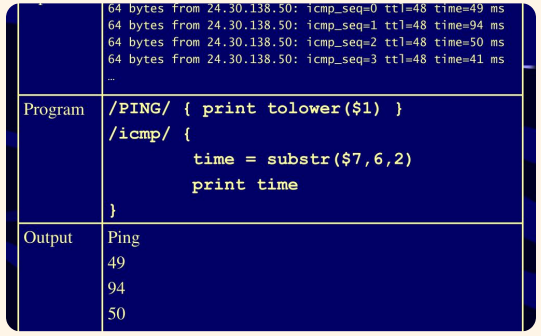


Discovering Linux Awk Commands

Join us on a journey through the powerful world of Linux Awk commands, where we will explore different command-line options, built-in functions, and advanced commands.

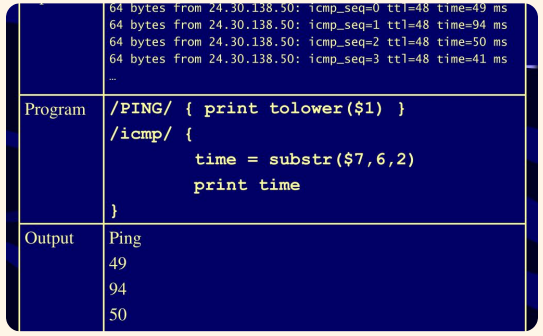
by vk2908 .

Basic Awk Commands



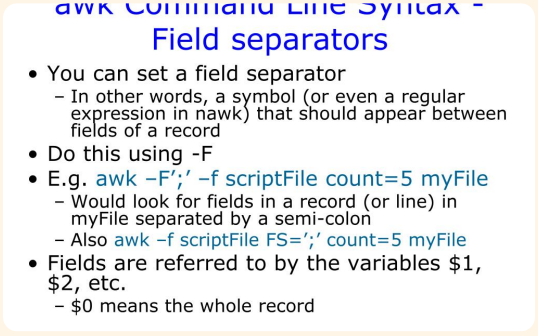
Print Statement

The print statement is one of Awk's most basic commands, allowing you to display text on the screen or generate reports.



Formatting Output

Awk allows you to customize the output of your scripts with formatting options, including padding, field widths, and more to meet your needs.



Field and Record Separators

This command enables you to specify which character or characters you want to use as field and record separators in a file, making it easy to manipulate the input.

Awk Options and Flags

1

Command-line Options

Awk offers a plethora of command-line options, including debug modes, source file search paths, and specifying characters to use as whitespace.

2

-F and -v Options

With the -F option, you can specify the field separator, while the -v option allows you to create user-defined variables. Take full control of your scripts!

3

-f Option for Script Files

The -f option lets you specify an Awk script file, giving you more flexibility in managing your code. Edits can be made to the script file without altering the original data.

4

-i Option for In-Place Editing

You can modify the original file with the -i option in your awk scripts, changing it as per your desire. Never lose your original work anymore.

Advanced Awk Commands

Conditional Statements

Awk allows for conditionals, including if-else statements and comparison operators, improving the script's flexibility and adding more logic to it.

Loops and Iterations

The For, While, and Do-While loops in Awk let you iterate through your data, executing the same operation multiple times without having to rewrite it.

Awk Built-In Functions

Awk is packed with useful built-in functions. The length function can count characters and fields, while the substr function allows you to extract substrings from fields. Even mathematical calculations are possible!

Array Functions

1

Initialization and Usage

Awk also offers a great feature of array initialization and usage to store information that can be searched, sorted, and edited easily, making scripts more powerful.

2

Associative Arrays

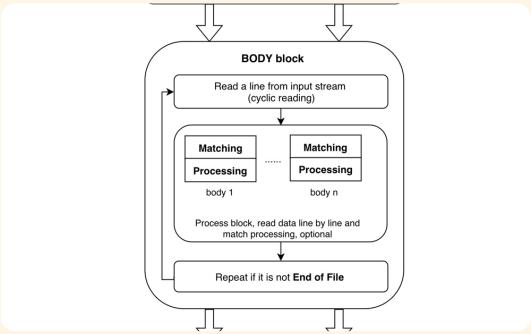
Associative arrays permit data to be stored in a more meaningful way using key-value pairs. Optimize your databases and create better, more efficient data storage.

3

Arrays

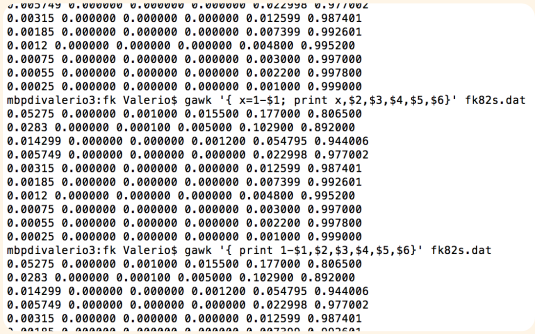
In a plain and easy way, we can understand the syntax and structure of arrays in Awk commands, embracing a brand new side of scripting!

Awk Scripts and Examples



Practical Examples and Case

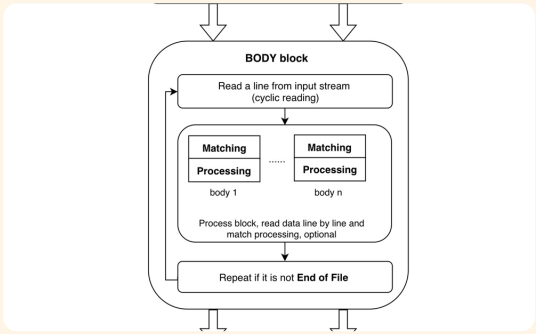
Finally, we'll explore some examples of using awk scripts in actual cases discussing different scenarios while demonstrating how to manipulate data and create reports efficiently.



```
0.00315 0.000000 0.000000 0.000000 0.012599 0.987401
0.00185 0.000000 0.000000 0.000000 0.007399 0.992601
0.0012 0.000000 0.000000 0.000000 0.004800 0.995200
0.00075 0.000000 0.000000 0.000000 0.003000 0.997000
0.00055 0.000000 0.000000 0.000000 0.002200 0.997800
0.00025 0.000000 0.000000 0.000000 0.001000 0.999000
mbpdivalerio3:fk Valerio$ gawk '{ x=1-$1; print x,$2,$3,$4,$5,$6}' fk82s.dat
0.05275 0.000000 0.001000 0.015500 0.177000 0.806500
0.0283 0.000000 0.000100 0.005000 0.102900 0.892000
0.014299 0.000000 0.000000 0.001200 0.054795 0.944006
0.005749 0.000000 0.000000 0.000000 0.022998 0.977002
0.00315 0.000000 0.000000 0.000000 0.012599 0.987401
0.00185 0.000000 0.000000 0.000000 0.007399 0.992601
0.0012 0.000000 0.000000 0.000000 0.004800 0.995200
0.00075 0.000000 0.000000 0.000000 0.003000 0.997000
0.00055 0.000000 0.000000 0.000000 0.002200 0.997800
0.00025 0.000000 0.000000 0.000000 0.001000 0.999000
mbpdivalerio3:fk Valerio$ gawk '{ print 1-$1,$2,$3,$4,$5,$6}' fk82s.dat
0.05275 0.000000 0.001000 0.015500 0.177000 0.806500
0.0283 0.000000 0.000100 0.005000 0.102900 0.892000
0.014299 0.000000 0.000000 0.001200 0.054795 0.944006
0.005749 0.000000 0.000000 0.000000 0.022998 0.977002
0.00315 0.000000 0.000000 0.000000 0.012599 0.987401
```

Arithmetic Calculations

Prepare yourself to see functions that can perform mathematical operations on data and fields.



Loops and Iterations

Transform data using iterations and loops repetitively.