

More on Single Dimensional Array

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives

We will learn about



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We will learn about

- Using awk array with file



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- Scan the elements of an array



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- Delete statement



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- Scan the elements of an array
- Delete statement
- ARGV array and ENVIRON array



System Requirements



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- **Ubuntu Linux 16.04 OS**



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- **gedit text editor 3.20.1**



Pre-requisites

- Please go through the earlier awk tutorial on array
<http://spoken-tutorial.org/>



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- Please go through the earlier awk tutorial on array
<http://spoken-tutorial.org/>
- Knowledge of any programming language like C or C++



Code Files

- The files used in this tutorial are available in the [Code Files link](#) on this tutorial page



Code Files

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- Please download and extract them



Scanning array elements



Scanning array elements

```
for (var in array)  
    statements
```



Scanning array elements

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```

- **This loop executes statements once for each index in array**



Scanning array elements

```
for (var in array)  
    statements
```

- **This loop executes statements once for each index in array**
- **The variable var will be set to the index values one by one**



Delete



Delete

- Delete an element:
`delete arrayname[index]`



Delete

- Delete an element:
delete arrayname[index]
- Delete entire array:
delete arrayname



ARGV array



ARGV array

- ARGV implies the number of command line arguments



ARGV array

- ARGC implies the number of command line arguments
- ARGV is an array that stores the command-line arguments



ENVIRON array



ENVIRON array

- **Built-in variable ENVIRON** is an associative array of environment variables



ENVIRON array(Cont.)

- The array element indices are the environment variable names



ENVIRON array(Cont.)

- The array element indices are the environment variable names
- The array element values are the values of the particular environment variables



ENVIRON array(example:)



ENVIRON array(example:)

- Let's print our username



ENVIRON array(example:)

- Let's print our username
- We need to print the value of environment variable USER



Summary

- Using awk array with file
- Scan the elements of an array
- Delete statement
- ARGV array and ENVIRON array



Assignment 1

Calculate certain allowances for the students who have passed

- **Paper presentation allowance: 80% of the stipend**
- **Performance incentive: 20% of the stipend**



Assignment 1(Cont.)

- Store the allowances in two different arrays
- Print the total amount required for each allowance and the average



Assignment 2

Print the value of environment variable PATH from awk program



About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Forum for specific questions

- Do you have questions in THIS Spoken Tutorial?
- Please visit <http://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- Someone from our team will answer them



Acknowledgements

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- It is supported by the National Mission on Education through ICT, MHRD, Government of India
- More information on this Mission is available at:

<http://spoken-tutorial.org/NMEICT-Intro>



Thank You

Thanks for joining
<http://spoken-tutorial.org>

