

More on Arrays in BASH

Talk to a Teacher Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://www.sakshat.ac.in>

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Learning Objectives



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- ▶ Extract an element from an **Array**



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- ▶ Replace an element in an **Array**



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- ▶ **Add an element to an Array**



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- ▶ Extract an element from an **Array**
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- ▶ Add an element to an **Array**
- ▶ **Remove an element from an Array**



Prerequisite



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- ▶ You should be familiar with Linux Operating System



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- ▶ If not, for relevant tutorials please visit <http://spoken-tutorial.org>



System Requirements



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- ▶ **Ubuntu Linux 12.04 OS**



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- ▶ **GNU Bash version 4.1.10**



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- ▶ **GNU Bash version 4.1.10**
- ▶ **GNU Bash version 4 or above is recommended for practice**



Extract an element from an Array



Extract an element from an Array

- Elements in an **Array** can be extracted from any **position**



Extract an element from an Array

- ▶ Elements in an **Array** can be extracted from any **position**
- ▶ **Position** is the **index number**



Extract an element from an Array

- ▶ Elements in an **Array** can be extracted from any **position**
- ▶ **Position** is the **index number**
- ▶ **Index number** **always start from zero**



Extract an element from an Array



Extract an element from an Array

Syntax:

- ▶ `ArrayName[@]:position:Number`
of elements



Replace an element in an Array



Replace an element in an Array

Syntax:

- ▶ `ArrayName[n]='NewWord'`



Add an element to an Array



Add an element to an Array

Syntax:

- ▶ `ArrayName=("${ArrayName[@]}"
"New_word_1" "New_word_2")`



Remove an element from an Array



Remove an element from an Array

Syntax:

► `unset ArrayName[Index number]`



Summary



Summary

- ▶ **Extract an element from an Array**
- ▶ **Replace an element in an Array**
- ▶ **Add element to an Array**
- ▶ **Remove element from an Array**



Assignment

Declare an Array **names2** of length 7 and perform following operations -

- ▶ Extract three elements starting from index two
- ▶ Replace third element with 'Debian' and display
- ▶ Append any new name at the end of Array



About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
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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



Acknowledgments

- ▶ Spoken Tutorial Project is a part of the Talk to a Teacher project
- ▶ 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>

