

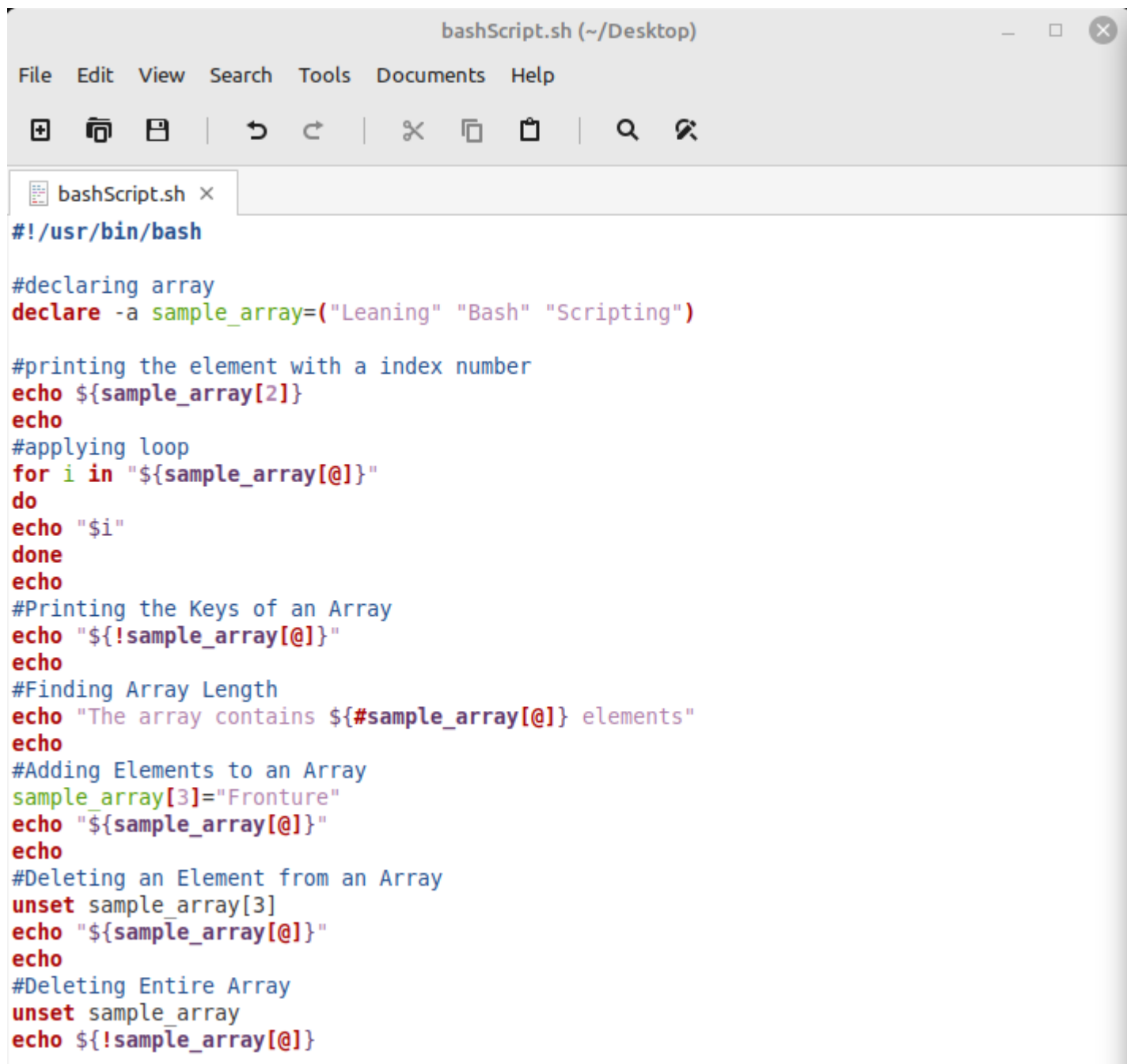
Bash Array

Last updated by | Shakibe Hasan | Jun 12, 2023 at 5:19 PM GMT+6

A bash array is a data structure designed to store information in an indexed way. Bash arrays can store different types of elements like string and number in the same array. Bash doesn't support multidimensional array. So its not possible to add a array within array

There are two types of bash arrays:

- **Indexed** – the array is referred via integers or numbers.
(declare -a ARRAY_NAME) ****lowercase -a for indexed array**
ARRAY_NAME[index_1]=value_1
ARRAY_NAME[index_2]=value_2
ARRAY_NAME[index_n]=value_n
- **Associative** – the array is referred via strings or a set of characters and words
(declare -A ARRAY_NAME) ****Uppercase -A for associative array**
declare -A ARRAY_NAME
ARRAY_NAME[index_foo]=value_foo
ARRAY_NAME[index_bar]=value_bar
ARRAY_NAME[index_xyz]=value_xyz



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bashScript.sh (~/Desktop)

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bashScript.sh x

#!/usr/bin/bash

#declaring array
declare -a sample_array=("Leaning" "Bash" "Scripting")

#printing the element with a index number
echo ${sample_array[2]}
echo
#applying loop
for i in "${sample_array[@]}"
do
echo "$i"
done
echo
#Printing the Keys of an Array
echo "${!sample_array[@]}"
echo
#Finding Array Length
echo "The array contains ${#sample_array[@]} elements"
echo
#Adding Elements to an Array
sample_array[3]="Fronture"
echo "${sample_array[@]}"
echo
#Deleting an Element from an Array
unset sample_array[3]
echo "${sample_array[@]}"
echo
#Deleting Entire Array
unset sample_array
echo "${!sample_array[@]}"
```

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devops@devops - Lenovo - G410:~/Desktop$ ./bashScript.sh
Scripting

Leaning
Bash
Scripting

0 1 2

The array contains 3 elements

Leaning Bash Scripting Fronture

Leaning Bash Scripting

devops@devops - Lenovo - G410:~/Desktop$
```

Ref: javatpoint.com