National University of Modern Languages

LAB TASK

Roll # 2340

Class: BSCS 5B Morning

Subject: Operating System(Lab)

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Implement Different Concepts related to Array

CODE:

```bash
#!/bin/bash
echo "1-SLICING AND LENGTH OF A STRING"
var="WELCOME TO THE GEEKSTUFF"
echo $var
echo "Length is:"${#var}
echo ${var:15}
echo ${var:15:4}
echo "2-TO CHECK IF IT IS DIRECTORY  FILE OR NOT"
 if [ -f $1 ]
 then
 echo "it is a file"
elif [ -d $1 ]
then
 echo it is a directory
else
echo "something else"
 fi
echo "3-SEARCH & REPALCE IN AN ARRAY ELEMENTS"
Unix=('Debian' 'Red hat' 'Ubuntu' 'Suse' 'Fedora' 'UTS' 'OpenLinux');
echo "The array is: "${Unix[@]}
echo "The Replacing is: "${Unix[@]/UTS/OS TASK}
echo "4-ADD AN ELEMENT TO AN ARRAY"
Unix=("${Unix[@]}" "AIX" "HP-UXX")
```

```bash
echo ${Unix[7]}

echo "5-REMOVING AN ELEMENT"

unset Unix[3]

echo "deletion successful"

Unix=(${Unix[@]:0:3} ${Unix[@]:4})

echo ${Unix[@]}

echo "6-Remove Bash Array Elements using Patterns"

declare -a Unix=('Debian' 'Red hat' 'Ubuntu' 'Suse' 'Fedora');

declare -a patter=( ${Unix[@]/Red*/} )

echo ${patter[@]}

echo "7-Copying an Array"

Linux=(${Unix[@]})

echo ${Linux[@]}

echo "Concatenation of two Bash Arrays"

Unix=('Debian' 'Red hat' 'Ubuntu' 'Suse' 'Fedora' 'UTS' 'OpenLinux');

Shell=('bash' 'csh' 'jsh' 'rsh' 'ksh' 'rc' 'tcsh');

concatenate=("${Unix[@]}" "${Shell[@]}")

echo ${concatenate[@]}

echo "8-ELEMENTS IN CONCAT ARRAY: "${#concatenate[@]}

unset concatenate

echo "ENTIRE ARRAY DELETE:"${#concatenate[@]}

echo "9-Load Content of a File into an Array"

filecontent=(`cat "$1"`)

for t in "${filecontent[@]}"

do

echo $t

done
```

echo "READ FILE CONTENT"

exit 0;

OUTPUT:

```
farhan@DESKTOP-JJ3BRM1: ~/OS
farhan@DESKTOP-JJ3BRM1:~/OS$ chmod +x task
farhan@DESKTOP-JJ3BRM1:~/OS$ ./task logfile
1-SLICING AND LENGTH OF A STRING
WELCOME TO THE GEEKSTUFF
Length is:24
GEEKSTUFF
GEEK
2-TO CHECK IF IT IS DIRECTORY  FILE OR NOT
it is a file
3-SEARCH & REPALCE IN AN ARRAY ELEMENTS
The array is: Debian Red hat Ubuntu Suse Fedora UTS OpenLinux
The Replacing is: Debian Red hat Ubuntu Suse Fedora OS TASK OpenLinux
4-ADD AN ELEMENT TO AN ARRAY
AIX
5-REMOVING AN ELEMENT
deletion successful
Debian Red hat Ubuntu Fedora UTS OpenLinux AIX HP-UXX
6-Remove Bash Array Elements using Patterns
Debian Ubuntu Suse Fedora
7-Copying an Array
Debian Red hat Ubuntu Suse Fedora
Concatenation of two Bash Arrays
Debian Red hat Ubuntu Suse Fedora UTS OpenLinux bash csh jsh rsh ksh rc tcsh
8-ELEMENTS IN CONCAT ARRAY: 14
ENTIRE ARRAY DELETE:0
9-Load Content of a File into an Array
welcome
to
thepython
world
This
is
fun
world!
READ FILE CONTENT
```