

Bash scripting

Flow me :

Security test Group on Facebook:

<https://www.facebook.com/groups/155349421484222/>

On YouTube

<https://www.youtube.com/channel/UCpis91ZI0N-CGjqjFXuRt4w>

On twitter

<https://twitter.com/abdallahelsoka1>

Echo&printf

`#!/bin/bash`

`Echo "hello world";`

`Printf "hello world";`

`%s = string`

`%d = integer`

COMMENTS

`#!/bin/bash`

`#comment`

`<<comment`

`some comments`

`comment`

VARIABLES

`#!/bin/bash`

`var="value"`

default variables

`$hostname`

`$home`

etc....

VARIABLES

`#!/bin/bash`

readonly variable

unset variable

INPUT

```
#!/bin/bash
```

```
Read -p "your name : " name
```

```
Read -t time
```

```
Read -s "your password :" password
```

MATH EXPRESSIONS

```
#!/bin/bash
```

```
number1=15
```

```
number2=16
```

```
echo $((number1+number2))
```

```
echo `expr $number1+$number2`
```

#!/bin/bash

IF STATEMENT

if [condition]; then

“code”

elif [condition]; then

“code”

else

“code”

fi

test condition && "code" || «code»

IF STATEMENT

String Comparison	Description
Str1 = Str2	Returns true if the strings are equal
Str1 != Str2	Returns true if the strings are not equal
-n Str1	Returns true if the string is not null
-z Str1	Returns true if the string is null
Numeric Comparison	Description
expr1 -eq expr2	Returns true if the expressions are equal
expr1 -ne expr2	Returns true if the expressions are not equal
expr1 -gt expr2	Returns true if expr1 is greater than expr2
expr1 -ge expr2	Returns true if expr1 is greater than or equal to expr2
expr1 -lt expr2	Returns true if expr1 is less than expr2
expr1 -le expr2	Returns true if expr1 is less than or equal to expr2
! expr1	Negates the result of the expression
File Conditionals	Description
-d file	True if the file is a directory
-e file	True if the file exists (note that this is not particularly portable, thus -f is generally used)
-f file	True if the provided string is a file
-g file	True if the group id is set on a file
-r file	True if the file is readable
-s file	True if the file has a non-zero size
-u	True if the user id is set on a file
-w	True if the file is writable
-x	True if the file is an executable

array

#!/bin/bash

```
array_name=(value1 space value2)  
${array_name[index]}  
array_name[0]= «value»
```

While loop

```
#!/bin/bash
```

```
a=0
```

```
while [ $a -lt 10 ]
```

```
do
```

```
echo $a
```

```
a=`expr $a + 1`
```

```
done
```

Until loop

```
#!/bin/bash
```

```
a=0
```

```
until [ ! $a -lt 10 ] do
```

```
echo $a
```

```
a=`expr $a + 1`
```

```
done
```

For loop

```
#!/bin/bash
```

```
for FILE in $HOME/.bash*
```

```
do
```

```
echo $FILE
```

```
done
```

select

```
#!/bin/bash
```

```
Select FILE in $HOME/.bash*
```

```
do
```

```
echo $FILE
```

```
done
```

case

```
#!/bin/bash
```

```
case $DRINK in tea | cofee | water | all)
echo "Go to canteen" ;;
juice | appe)
echo "Available at home" ;; none)
break ;; *)
echo "ERROR: Invalid selection" ;; esac
```

Loop control

#!/bin/bash

Break

Break number

continue

function

```
#!/bin/bash
```

```
number_one ()
```

```
{ echo "This is the first function speaking..."
```

```
number_two } number_two ()
```

```
{ echo "This is now the second function  
speaking..." } #
```

```
Calling function one. number_one
```

function

```
#!/bin/bash
```

```
number_one ()
```

```
{ echo "This is the first function speaking..." number_two
```

```
Return 10
```

```
} number_two ()
```

```
{ echo "This is now the second function speaking..." } #
```

```
Calling function one. number_one
```

```
Var=$?
```

```
Echo var
```

User Administration

#!/bin/bash

/etc/passwd: – Keeps user account and password information. This file holds the majority of information about accounts on the Unix system.

/etc/shadow: – Holds the encrypted password of the corresponding account. Not all the system support this file.

/etc/group: – This file contains the group information for each account.

/etc/gshadow: – This file contains secure group account information.

process

`#!/bin/bash`

`Ps`

`Ps -f`

Full info

`Kill -time process id`