GNU/Linux

Scripting II

Lesson 10

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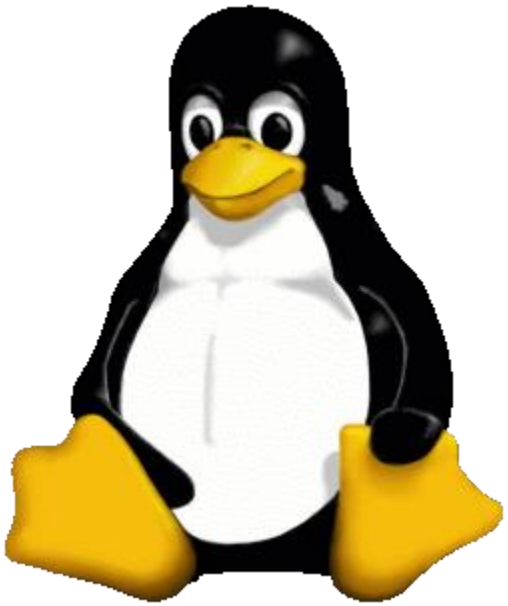


If … then … else

```
#!/bin/bash
count=42
if [ $count -eq 42 ]
then
echo "42 is correct."
elif [ $count -gt 42 ]
then
echo "Too much."
else
echo "Not enough."
fi
```

For Loop

```
for i in 1 2 4
do
echo $i
done
```

```
#!/bin/ksh
for counter in `seq 1 20`
do
echo counting from 1 to 20, now at $counter
sleep 1
done
```

For Loop (continue)

```
#!/bin/bash
for counter in {1..20}
do
echo counting from 1 to 20, now at $counter
sleep 1
done
```

While Loop

```
i=100
while [ $i -ge 0 ]
do
echo Counting down, from 100 to 0 now at $i
let i--
done
```

Endless loop

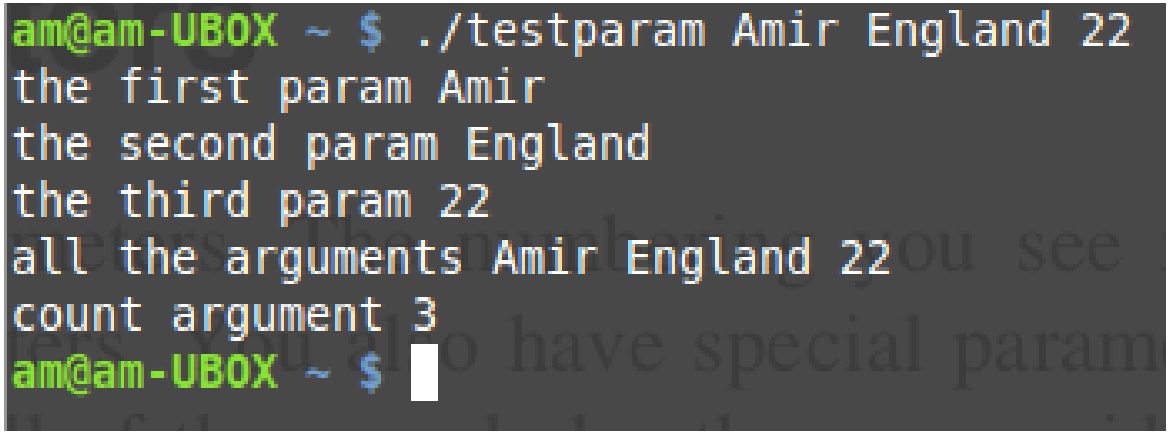
```
#!/bin/ksh
# endless loop
while :
do
echo hello
sleep 1
done
```

until Loop

```
let i=100;
until [ $i -le 0 ]
do
echo Counting down, from 100 to 1 now at $i
let i--
done
```

$1, $2, $3, …

Bash shell has parameters as $n.



A remainder

```
am-UBOX:~> bash
bash: setenv: command not found
am@am-UBOX ~ $ cat >>testparam <<end
> #! /bin/bash
> echo the first param $1
> echo the second param $2
> echo the third param $3
>
> echo all the arguments $*
> echo count argument $#
> end
am@am-UBOX ~ $ chmod +x testparam
am@am-UBOX ~ $ cat testparam
#! /bin/bash
echo the first param
echo the second param
echo the third param

echo all the arguments
echo count argument 0
am@am-UBOX ~ $
```

$0 : name of the script

```
#!/bin/bash
echo this file is: $0

if [ "$#" == "0" ]
then
echo You have to give at least one parameter.
exit 1
fi
while (( $# ))
do
echo You gave me $1
shift
done
```

```
am@am-UBOX ~ $ ./shiftparam
this file is: ./shiftparam
You have to give at least one parameter.
am@am-UBOX ~ $ ./shiftparam Amir England 22
this file is: ./shiftparam
You gave me Amir
You gave me England
You gave me 22
am@am-UBOX ~ $
```

Exercises 1

Write a script that uses a for loop to count from 3 to 7.

Exercises 2

Write a script that uses a for loop to count from 1 to 17000.

Exercises 3

Write a script that uses a while loop to count from 3 to 7.

Exercises 4

Write a script that uses an until loop to count down from 8 to 4.

Exercises 5

Write a script that counts the number of files ending in .txt in the current directory.

Exercises 6

Wrap an if statement around the script so it is also correct when there are zero files ending

in .txt.