

Creating a script

Put your command in an executable file whose first line is the following she-bang:

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

Script arguments

Arguments passed to the script via command line are stored in the variables 1, 2, ... Do not forget to use \$ to get their value.

Command substitution

To use the result of a command (to store it in a variable for instance):

```
MY_PATH = `command`  
MY_PATH = $(command)
```

Conditionals

```
if [[ condition ]] ; then  
  commands1  
[else  
  commands2  
]  
fi
```

References

- [1] M. Cooper. *Advanced Bash-Scripting Guide – An in-depth exploration of the art of shell scripting*. <http://tldp.org/LDP/abs/html/>. 2012.
- [2] V. G. Gite. *Linux Shell Scripting Tutorial – A Beginner's handbook*. <http://www.freeos.com/guides/lsst/>. 2002.
- [3] *Bash Hackers Wiki*. <http://wiki.bash-hackers.org/doku.php>.

Tests

! EXPRESSION	EXPRESSION is false
EXPRESSION1 -a EXPRESSION2	both expressions are true
EXPRESSION1 -o EXPRESSION2	one of the expression is true
STRING1 = STRING2	strings are equal
STRING1 != STRING2	strings are not equal
INTEGER1 -eq INTEGER2	INTEGER1 is equal to INTEGER2
INTEGER1 -gt INTEGER2	INTEGER1 is greater than INTEGER2
INTEGER1 -ge INTEGER2	INTEGER1 is greater than or equal to INTEGER2
INTEGER1 -lt INTEGER2	INTEGER1 is less than INTEGER2
INTEGER1 -le INTEGER2	INTEGER1 is less than or equal to INTEGER2
-e FILE	FILE exists
-d FILE	FILE exists and is a directory
-f FILE	FILE exists and is a regular file

For and while loops

```
for variable in [list]; do  
  commands  
done  
  
while [[ condition ]] ; do  
  commands  
done
```