

# Bash Cheat Sheet

BASH stands for **B**ourne-**A**gain **S**hell

each BASH script should start with the shebang : `#!/bin/bash`

## Comparison operators

Operator	Description		Operator	Description
-eq	Is equal to		-n	Is not null
-ne	Is not equal to		-z	Is null
-gt	Is greater than		-r	file exists and is readable by the user
-ge	Is greater than or equal to		-e	file exists
-lt	Is less than		-f	file is a regular file (not directory or other special type)
-le	Is less than or equal to		-s	file size is greater than 0
==	is equal to		-x	file is executable by the user
!=	is not equal to		-w	file is writable by the user
<	Is less than		!	negates the operator
<=	Is less than or equal to			
>	Is greater than			
>=	Is greater than or equal to			

## Variables for script arguments

Variable	Description		Variable	Description
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\$1 ... \$n	Argument number		\$#	Number of arguments
\$0	Name of the file		\$?	Return value (0 = ok, > 0 = error)
\$*	List of arguments			

## Built in variables

Variable	Description		Variable	Description
\$BASH	path to the bash binaries		\$BASH_VERSION	version of bash
\$BASH_ENV	bash environment (used within the scripts)		\$BASH_VERSINFO	more version details
\$\$	process id of the current script		\$PATH	path variable
\$EDITOR	default editor		\$UID	users id
\$EUID	effective user id		\$FUNCNAME	name of the current function (executed from within the function)
\$GROUPS	groups to which the current user belongs		\$HOME	home directory of the current user
\$HOSTTYPE	system type		\$MACHTYPE	machine type
\$LINENO	line number		\$PWD	print working directory
\$OLDPWD	old print working directory		\$OSTYPE	operating system type
\$REPLY	default answer for a "read" command without explicit variable declaration		\$SECONDS	the time the script has run until this point
\$RANDOM	Generate a random number between 0 and 32767			

## Declare and a few howtos

### Declare a variable as read only

```
declare -r my_read_only_variable=5
```

## Declare a variable as an integer

```
declare -i my_integer_variable=5
```

## Declare a variable as an array

```
declare -a myvar=(1 2 3 4 5)
```

## Declare a function and then run it

```
declare -f myFunction

myFunction(){
echo "my function runs"
}

myFunction
```

## Declare a variable and export it

```
declare -x myvar=3
```

## Other commands

Variable	Description		Variable	Description

Revision #13

Created 29 June 2021 19:31:11 by László Bodor

Updated 6 July 2021 14:11:57 by László Bodor