Cheatography

Bash parameter expansion Cheat Sheet

by Jens Preußner (Jenzopr) via cheatography.com/18621/cs/2387/

Basic parameter usage

```
FRUIT="kiwi"
FRUITS =(o ranges apples bananas)
echo " Today we offer $FRUITs. Maybe you like some ${FRUIT}s? We also have ${FRUI TS[ *]}."
```

Today we offer . Maybe you like some kiwis? We also have oranges apples bananas.

Parameter indirection

```
kiwi=5
fruit= " kiw i"
echo "A ${fruit} costs ${!fruit} coins."
```

A kiwi costs 5 coins.

Case modification

```
boy="john"
girl="m ARY "
echo "The boys name is ${boy}, properly written as ${boy^}. The girl is ${girl,,}, but I prefer ${girl ~~}."
```

The boys name is john, properly written as John. The girl is mary, but I prefer Mary.

Substring removal

${VAR#P}	Remove pattern P from start
${VAR%P}	Remove pattern P from end
FILE	text_file.txt
${FILE%.*}	text_file
${FILE##.*}	txt
DIR	/a/b/c.txt
${DIR%/*}	/a/b
${DIR##*/}	c.txt

When working on arrays, expansion will handle each element separately.

Search and Replace

${VAR/P/R}	Replace pattern P with R (1st occurence)
${VAR//P/R}	Replace pattern P with R (all occurences)
A	"Dynamos can explode"
${A/mo-s/mite}	"Dynamite can explode"
B	"XXX"
${B/#X/Y}	"YXX"
${B/%X/Y}	"XXY"

String and arry length

${#PARAM}	length of $PARAM
${#ARR[1]}	length of 2nd element in $ARR
${#ARR[@]}	number of elements in $ARR

Caution: The number of elements in an array may not reflect its highest index!

Substrings

T	A day without sunshine is like, you know, night.
${T:OFS}	*OFS is the position to start*
${T:32}	you know, night.
${T:(-6)}	night.
${T:OFS:L}	*L is an optional length*
${T:14:9}	sunshine
${T:(-6):5}	night
ARR	(This is a text)
${ARR[-0]:2:2}	is
${array[@]:1:2}	is a

Default values

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