

# Bash

## extract filename parts

source

```
~% FILE="example.tar.gz"
```

```
~% echo "${FILE%%.*}"
```

example

```
~% echo "${FILE%.*}"
```

example.tar

```
~% echo "${FILE#*.*}"
```

tar.gz

```
~% echo "${FILE##*.*}"
```

gz

## assign var from command output

```
var="$(echo "eat at joe's")"
```

## uppercase var

```
echo "${var^^}"
```

## lowercase var

```
echo "${var,,}"
```

## slice var

```
"${VAR:offset:length}"
```

## increment var

```
i=$((i+1))
```

## native regex

```
if [[ "$var" =~ [0-9]{3} ]]
```

```
then
```

```
    echo 'it matches'
```

```
fi
```

## print line number

```
echo "$LINENO"
```

## clear starship error code

```
true
```

## check for program

```
if (! type 7z > /dev/null 2>&1 )
```

```
then
```

```
    echo "7zip not installed"
```

```
fi
```

## assign to an array

```
myArray=()
```

```
myArray+=("$var")
```

## count array elements

```
echo "array has ${#myArray[@]} items"
```

## count args

```
echo "$#"
```

## iterate an array

```
for var in "${myArray[@]}"
do
    echo "$var"
done
```

## iterate args

```
for arg in "$@"
do
    echo "$arg"
done
```

## iterate lines

```
while read -r line
do
    echo "$line"
done < <(echo "$lines")
```

## substring

```
# ${string:offset:length}

var="hello world"
echo "${var:0:5} bob"
```

## move to beginning and clear line

```
echo -ne "\r\033[2K task x% done"
```

## date gate

```
if [[ "$(date '+%s')" -lt "$(date --date '2552-09-28' '+%s')" ]]
then
    echo 'skippy skippy'
    exit 0
fi
```

## capture output and test success

```
if output=$(ls * 2>&1)
then
    echo "success"
else
    echo "failure"
fi
```

## use variable in place of file

```
echo -n 'one\ntwo\nthree' | grep -f <(echo -e 'two\nthree\nfour')
```

## test operators

operator	desc
-eq	equal to
-gt	greater than
-ge	greater than or equal to
-lt	less than
-le	less than or equal to
-f	file exists
-d	directory exists
-e	anything exists
-x	file is executable
-ef	file path equals
-n	string is not empty
-z	string is empty

## using operators

```
if [[ "$var" -gt 0 ]]
then
    echo "yep it's greater than zero"
fi
```

```
if test "$var" -gt 0
then
    echo "yep it's greater than zero"
fi
```

## TODO

- add preferred arg parsing method