

Moving Around			File Management	
h		move cursor left	:e filename	open file for edit
j		move cursor down	:w	save file
k		mover cursor up	:w filename	save to filename
l		move cursor right	:q	close current file
O		move cursor beginning line	:wq	save and close
^		move cursor to first non-whitespace of line	:q!	close without saving
\$		move cursor to end of line	:wa	save all buffers to disk
gg		move cursor to beginning of file	Visual Mode Commands	
G		move cursor to end of file	v	enter visual mode and select char by char
5G		move cursor to line number 5	V	enter visual mode and select line by line
Search and replace			y	yank (copy) selection
/		search forward for pattern	d	delete selection
?		search backward for pattern	c	change selection and enter insert mode
n		repeat the last search in the same direction	Macros and registers	
N		repeat the last search in opposite direction	qa	start recording macro in register a
:%s/pattern/replacement/g		replace all occurrences of ‘pattern’ with ‘replacement’	q	stop recording macro
Splits and tabs			@a	execute macro stored in ‘a’
:sp		split horizontally	“	access a specific register
:vsp		split vertically	“ay	yank into register ‘a’
:tabe		create new tab	https://www.linkedin.com/in/ankeorum/	
:tabc		close current tab		
:tabn		go to next tab		
:tabp		go to previous tab		
Editing commands				
i	enter insert mode before cursor		a	enter insert mode after the cursor
I	enter inser mode at the beginning of line		A	enter insert mode at end of line
o	insert a new line below current and go insert mode		O	insert new line above and go inser mode
dd	delete current line		D	delete from cursor to the end of the line
C	change from the cursor to the end of the line and enter edit mode		u	undo last change
cw	change from curso to end of word and enter insert mode		cb	change from cursor to beginning of word and enter insert mode

Bash cheat sheet: (), {}, \$(), \$(), \${}, [], [[]]

```
( ls /home/user; whoami )
```

Executes a list of commands in a separate **subshell**. The commands inside the parentheses run in a child process, isolated from the main shell.

```
{ cd /var/log; ls }
```

Executes a group of commands in the same **shell process**. Curly braces group commands together to be executed sequentially in the current environment.

```
files=(log.txt log2.txt log.txt)
```

Creates an array of values. Parentheses are used to define an **array**, allowing multiple elements to be stored in one variable.

```
result=$((5 * 3 + 1))
```

Performs **arithmetic calculations**. The double parentheses are used for math operations, such as addition, multiplication, etc.

```
output=$(grep "error" /var/log/syslog)
```

Executes a command and captures its output. **Command substitution** allows the result of a command (in this case, `grep`) to be stored in a variable.

```
if [ -f /etc/passwd ]
```

Tests a condition using single brackets. The `[` and `]` denote a test command that checks conditions, such as whether a file exists.

```
if [[ $USER == "root" ]]
```

Tests a condition using double brackets. Double brackets are more flexible in bash, supporting advanced pattern matching and **logical operators**.

```
backup_{1..4}.tar.gz
```

Expands to multiple strings. Brace expansion is a powerful way to generate sequences or multiple strings, useful for **batch operations**.

```
${username}
```

Accesses a variable's value. This is another way to reference a variable, commonly used when you need to follow it with additional **characters** or **text**.

```
${filename%.txt}.bak
```

Modifies variable content. Parameter expansion allows you to alter a variable's value, such as changing a file extension from `.txt` to `.bak`.