Linux Terminal Tips - Tab completion, command history

Tab Completion

Many shells support a tool called "Tab Completion"

Tab completion allows a shell to auto-complete a command you're typing.

Support you're in your home directory ~, which contains:

* Pictures
* Videos
* Documents
* Downloads

And suppose your Documents folder *only* contained the folder:

* python-examples

Ex 1 - Tab Completion:

If you type:

~ $ cd P

and press TAB, the shell will autocomplete this to:

~ $ cd Pictures/

Because the Pictures directory is the only directory within your current folder that starts with a "P".

Ex 2 - Tab Completion for Long Path:

If you type:

~ $ cd **Do**

and press TAB, nothing will happen.

Because your current directory contains more than one directory that starts with "Do".

On the other hand, if you type:

~ $ cd Doc

and press TAB, the shell will autocomplete this to:

~ $ cd Documents/

If you press TAB again, the shell will autocomplete this to:

~ $ cd Documents/python-examples/

Because the folder python-examples is the only existing file within the ~/Documents directory.

Command history

Command history allows you to navigate previous commands you enetered using the arrow keys

Let's say you've entered the following commands:

~ $ **cd** ~/Documents/**python**-examples

~/Documents/**python**-examples $ **python3** myprogram.**py**

Hello, World!

~/Documents/**python**-examples $ **cd** /

/ $

You can run a previous command, by pressing the up arrow key

Ex 1 - Running the last command:

If you press UP once:

~ $ cd ~/Documents/python-examples

~/Documents/python-examples $ python3 myprogram.py

Hello, World!

~/Documents/python-examples $ cd /

/ $ cd /

The shell will automatically put the last command you entered

~ $ cd ~/Documents/python-examples

~/Documents/python-examples $ python3 myprogram.py

Hello, World!

~/Documents/python-examples $ cd /

/ $ cd /

Ex 2 - Running previous command from session

If you had pressed UP *three times* instead of once:

~ $ **cd** ~/Documents/**python**-examples

~/Documents/**python**-examples $ **python3** myprogram.**py**

Hello, World!

~/Documents/**python**-examples $ **cd** /

/ $ **cd** ~/Documents/**python**-examples

It would automatically place the command you ran three commands ago (cd ~/Documents/python-examples)

After pressing enter, youwould find yourself back in your cd ~/Documents/python-examples directory:

~ $ cd ~/Documents/python-examples

~/Documents/python-examples $ python3 myprogram.py

Hello, World!

~/Documents/python-examples $ cd /

/ $ cd ~/Documents/python-examples

~/Documents/python-examples $