Tips for Linux shell

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References

- learncodethehardway

Commands

`cat <filename>`

- Reads out whole file.

`head -n <# of line> <filename>`

- Reads out n lines.

`<command> > <filename>`

- Output from `command` overwrites everything in `filename`.

`<command> >> <filename>`

- Output from `command` appends to `filename`.

`cp <source> <dest>`

- Copy `source` to `dest`.

`mv <source> <dest>`

- Move `source` to `dest`.

`rm <filename>`

- Remove filename.

`rm test.!(txt)`

- Removes all files that start with `test.` in the current directory apart from `test.txt`.

`du -hs`

- Print file sizes in easily readable form.

```
df -h
```

- Print disk sizes in easily readable form.

```
top
```

- Shows current processes.

```
lshw
```

- Shows current hardware.

```
find -name "<filename>"
```

- Find filename.

```
whereis <program>
```

- Gives location of binary program.

```
wc <filename>
```

- Gives word count of `filename`.

```
grep <text> <filename>
```

- Searches for `text` in `filename`.

```
<command> &
```

- Puts `command` in background.

```
sudo poweroff
```

- Turns off computer.

```
sudo reboot
```

- Reboots computer.

```
chmod -x <filename>
```

- Change owner of file to an executable.

```
chmod <xyz> <filename>
```

- Change owner of file to `xyz`.

- `x` is for current user's permission.

- `y` is for group's permission.

- `z` is for others' permission.

`<someprogram> | <someotherprogram>`

- "Pipes" the first output into second.

Another important thing about bash profiles is that export path line at the beginning kind of tells it to look for the right libraries and scripts to run

`find . -name '*.html' | xargs perl -pi -e 's/find/replace/g'`

- Finds and replaces text across all files in directory.

.zshrc

```
# If you come from bash you might have to change your $PATH.
# export PATH=$HOME/bin:/usr/local/bin:$PATH

# Path to your oh-my-zsh installation.
  export ZSH=/home/joa/.oh-my-zsh

# Set name of the theme to load. Optionally, if you set this to "random"
# it'll load a random theme each time that oh-my-zsh is loaded.
# See https://github.com/robbyrussell/oh-my-zsh/wiki/Themes
ZSH_THEME="robbyrussell"

# Uncomment the following line to use case-sensitive completion.
# CASE_SENSITIVE="true"

# Uncomment the following line to use hyphen-insensitive completion. Case
# sensitive completion must be off. _ and - will be interchangeable.
# HYPHEN_INSENSITIVE="true"

# Uncomment the following line to disable bi-weekly auto-update checks.
# DISABLE_AUTO_UPDATE="true"

# Uncomment the following line to change how often to auto-update (in days).
# export UPDATE_ZSH_DAYS=13

# Uncomment the following line to disable colors in ls.
# DISABLE_LS_COLORS="true"

# Uncomment the following line to disable auto-setting terminal title.
# DISABLE_AUTO_TITLE="true"

# Uncomment the following line to enable command auto-correction.
# ENABLE_CORRECTION="true"

# Uncomment the following line to display red dots whilst waiting for completion.
```

```
# COMPLETION_WAITING_DOTS="true"

# Uncomment the following line if you want to disable marking untracked files
# under VCS as dirty. This makes repository status check for large repositories
# much, much faster.
# DISABLE_UNTRACKED_FILES_DIRTY="true"

# Uncomment the following line if you want to change the command execution time
# stamp shown in the history command output.
# The optional three formats: "mm/dd/yyyy"|"dd.mm.yyyy"|"yyyy-mm-dd"
# HIST_STAMPS="mm/dd/yyyy"

# Would you like to use another custom folder than $ZSH/custom?
# ZSH_CUSTOM=/path/to/new-custom-folder

# Which plugins would you like to load? (plugins can be found in ~/.oh-my-zsh/plugins/*)
# Custom plugins may be added to ~/.oh-my-zsh/custom/plugins/
# Example format: plugins=(rails git textmate ruby lighthouse)
# Add wisely, as too many plugins slow down shell startup.
plugins=(git)

source $ZSH/oh-my-zsh.sh

# User configuration

# export MANPATH="/usr/local/man:$MANPATH"

# You may need to manually set your language environment
# export LANG=en_US.UTF-8

# Preferred editor for local and remote sessions
# if [[ -n $SSH_CONNECTION ]]; then
#   export EDITOR='vim'
# else
#   export EDITOR='mvim'
# fi

# Compilation flags
# export ARCHFLAGS="-arch x86_64"

# ssh
# export SSH_KEY_PATH="~/.ssh/rsa_id"

# Set personal aliases, overriding those provided by oh-my-zsh libs,
# plugins, and themes. Aliases can be placed here, though oh-my-zsh
# users are encouraged to define aliases within the ZSH_CUSTOM folder.
# For a full list of active aliases, run `alias`.
#
# Example aliases
# alias zshconfig="mate ~/.zshrc"
# alias ohmyzsh="mate ~/.oh-my-zsh"
```

```
# Mine
export PATH="$PATH:$HOME/bin"

alias agi='sudo apt-get install'
alias agr='sudo apt-get remove'
alias agu='sudo apt-get update'
alias acs='apt-cache search'
alias ach='apt-cache show'

alias utar='tar -zxvf'
alias mtar='tar -cvzf'

alias ntpup='sudo ntpdate ntp.ubuntu.com'
alias mscr='chmod +x'
alias srm='serial-mon'

alias clr='clear && clear'

alias emm='emacs -geometry 90x51+900+30'
alias emw='emacs -nw'

alias affs='sftp shahzeb1@gpu.srv.ualberta.ca'
alias afss='ssh shahzeb1@gpu.srv.ualberta.ca'

alias gad='git add -A'
alias gst='git status'
alias giff='git diff'
alias gcm='git commit'
alias gps='git push origin'
alias gpl='git pull origin'
alias gfc='git fetch'
alias glg="git log --graph --pretty=format:'%Cred%h%Creset -%C(yellow)%d%Creset %s %Cgreen(%cr)%Creset
alias gck='git checkout'
alias grml='git branch -d'
alias grms='git push origin --delete'
alias gbra='git branch'

alias vlg="valgrind --tool=memcheck --leak-check=full --track-origins=yes --show-reachable=yes"

alias endir="gpg-zip -c -o"
alias dedir="gpg-zip -d"

alias knet="sudo killall NetworkManager"
alias mine="cd ~/Documents/mine/"
```