🐥 Linux Warehouse

my knowledge base of Linux commands learned from YouTube video

# shell scripting

* shell refers to interface between users and operating system (os)
* operating system is a software that manages hardwares and provide services to other softwares
* shell scripting refers to writing script or file with sequence of commands to automate process in linux os

commands

* basic commands : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/others.sh>

| command | description |
| --- | --- |
| whoami | shows the currently logged-in user name |
| man | provides information or manual about command |
| clear | clears from terminal screen |
| date | prints current date and time |
| echo | displays arguments passed to it |
| | | passes standard output of previous command as standard input of next command |
| export | allows setting environment variable through terminal |

* file and directory : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/filesys.sh>

| command | description |
| --- | --- |
| pwd | prints current working directory |
| ls | lists contents of specified directory default to current directory |
| cd | changes working directory |
| mkdir | create directories |
| touch | creates empty files |
| rm | removes files or directories |
| cp | copies file or directory |
| mv | moves or renames file or directory |
| open | opens files or directories using default program |

* file content : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/content.sh>

| command | description |
| --- | --- |
| head | displays first few lines of a file |
| tail | displays last new lines of a file |
| cat | display concatenated content of files |
| less | displays contents of a file one page at a time |
| > and >> | redirects standard output to a file |
| wc | displays word, line and byte count of files |
| sort | merge and sort lines of files |
| uniq | displays unique lines of a file |

* wildcards : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/wildc.sh>

| symbol | description |
| --- | --- |
| \* | refers to zero or more characters |
| ? | refers to single character in path name |
| [...] | matches any character within the brackets |
| [^...] | matches any character NOT in the brackets |

* substitution : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/subst.sh>

| symbol | description |
| --- | --- |
| tilde or ~ | refers to home directory path of current user |
| $(...) | allows substituting command result |
| $((...)) | allows substituting arithmetic result |
| {...,...} | expands pattern to multiple patterns |

* file and directory content : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/filedir.sh>

| command | description |
| --- | --- |
| diff | detects differences between 2 files or file versions |
| find | find files and folders matching specified criteria |
| grep | allows searching file content or command output |
| gzip | compresses files to reduce storage consumption |
| gunzip | uncompresses specified g-zip files |
| tar | useful in manipulating archive which contains multiple files packaged together |
| nano | opens a text file for editing. save changes with ctrl+O and quit with editor ctrl+X |
| ln | allows creating links or shortcuts |

* resource and process : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/process.sh>

| command | description |
| --- | --- |
| du | calculates size default for current directory |
| df | calculates disk usage of file systems |
| ps | list current running user initiated processes |
| top | displays all running processes in real-time. useful for monitoring |
| kill | sends specified signal by default TERM to a process |

* foreground and background job : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/fbjobs.sh>

| command | description |
| --- | --- |
| & | useful in running long running commands as background job |
| jobs | lists background jobs or stopped processes created in current shell session |
| bg | resumes foreground job or stopped process in background |
| fg | brings background job to foreground or resumes stopped process in foreground |

* user and permission : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/uperm.sh>

| command | description |
| --- | --- |
| who | displays users logged in to system |
| su | switches to specified user |
| sudo | provides elevated privileges to run critical but permitted commands |
| passwd | updates current user's password by default |
| chown | changes owner of file or directory |
| chmod | manages permission on file or directory |

* additional commands : <https://github.com/ppkgtmm/linux-warehouse/blob/main/code/extras.sh>

| command | description |
| --- | --- |
| history | display commands history where most recently run command is at bottom |
| alias | creates alias for long command in current shell session |
| xargs | passes output of previous command as arguments of next command |