Navigation

pwd	Print Working Directory, this shows the path you are currently working on
cd	Change Directory, it can be a relative or absolute path (. is the directory itself and .. is the parent directory) Quick shotcuts `cd` goes to your home directory `cd -` goes to the last working directory `cd ~user_name` goes to the home directory of that username
ls	List contents of the directory
file	Determine file type, extensions in Linux does not necessarily determine the purpose of the file. This command shows a brief description of the file's content.

Important facts: - Filenames and directory names are case sensitive - Filenames starting with an period (.) are hidden - Do not use special characters other than period, dash and underscore

I/O Redirection

#####	Operators
>	Output truncate redirect
>>	Output append redirect
2>	Error redirect
#####	Commands
cat	Concatenate
sort	Sort lines of text
grep	Print lines matching a pattern
head	Output the first specified part of a file
tail	Output the last specified part of a file

Input, Output and errors are actually sent to special files called stdin, stdout and stderr. But by default, output and errors are linked to the screen and input is attached to the keyboard. We can redirect where output goes and where input comes from, and using that with pipelines, we can perform complex tasks.

Pipelines

Operator: | The difference of redirection and pipeline is that pipeline sends output as input for another command, while redirection does this to files.

General Commands

clear	Clears the terminal screen
date	Display current time and date
cal	Display a calendar of the current month
man	Manual for commands

Manipulating Files and Directories

cp	Copy files `-a` Copy all attributes of the original file `-i` Interactive mode (ask for confirmation), default is not ask `-r` Recursive copy (required when copying entire directories) `-u` Update, only overwrite if the copied files are newer
mv	Move or rename files (original file ceases to exist)
mkdir	Create directories
rm	Remove (delete) files and directories `-i` Prompt for confirmation, it does not ask for default `-r` Recursive remove files, required for directory `-f` Force, ignore nonexistent files and do not prompt

Important Directories

/	Root directory, everything begins here
/bin	contains programs for the system to boot and run (commands in bash are here too)
/dev	Devices mounted
/etc	System configuration files, and also shell scripts that run when the system boots. Important ones: `/etc/crontab` - definition for automated jobs `/etc/passwd` - list of user accounts
/home	Home directories for users
/lib	Shared libraries
/media	Removable media mount points
/root	The home directory for the root user
/tmp	Temporary files
/usr	Large directory tree, contains all the program files for regular users
/var	Directory for data that changes frequently