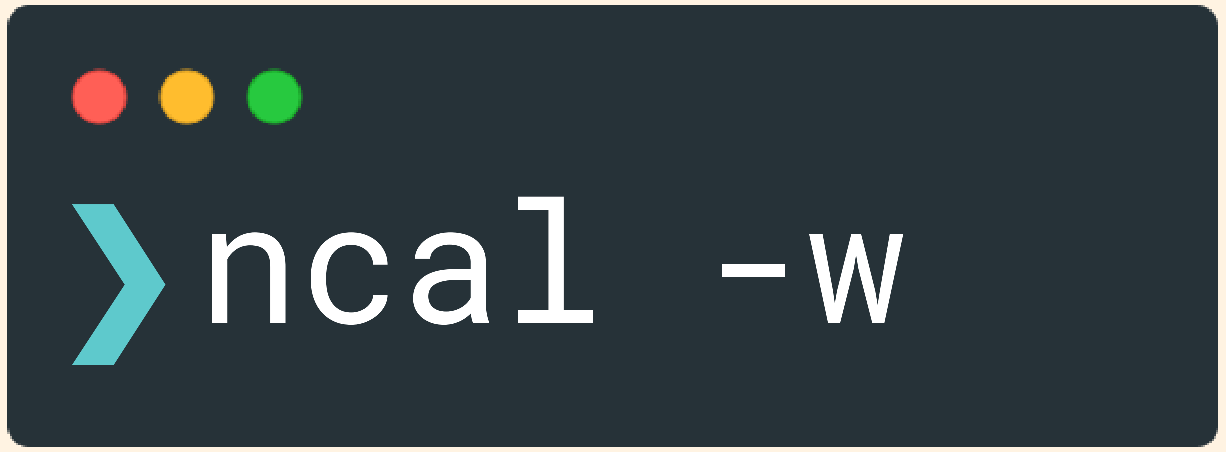
Getting Help

-w ??



```
❯ncal -w
```

What is that?

man pages

The **man pages**, short for manual pages, are a built-in form of documentation available on nearly all UNIX-like operating systems.

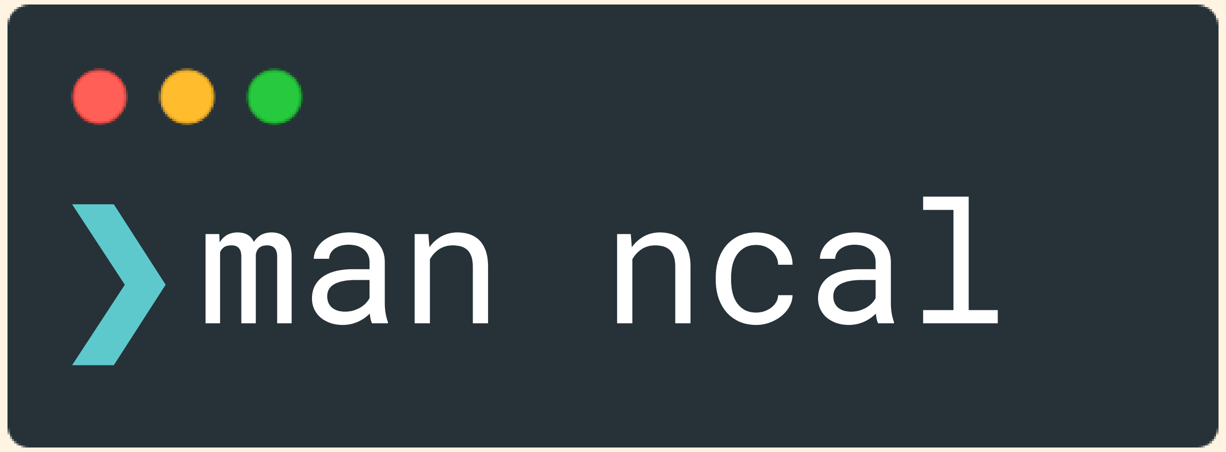
The specific contents vary from one operating system to another, but at a bare minimum the man pages include information on commands and their usage.

man pages

To read the specific piece of documentation associated with a given command,
run **man command**

For example, to learn more about the ncal command we could run **man ncal**

This displays a bunch of information on ncal that we can scroll through. Type "q" to exit.



```
❯man ncal
```

man pages contents

In general, each man page will follow this pattern:

- The title/name of the command with a short explanation of its purpose

- Synopsis of the command's syntax

- Description of the all the command's options

```
❯man echo
```

man pages synopsis

ncal [-31bhJeoSM] [-A number] [-B number] [-d yyyy-mm] [year]

Anything listed inside of square brackets is OPTIONAL. The only required part is **ncal.**

The above synopsis for ncal tells us that we can use the following options without providing any sort of additional parameter: -3, -1, -b, -h, -J, -e, -o, -S, and -M. To keep things brief, they are all lumped together as [-31bhJeoSM]

Then, we see other options in square brackets followed by their expected parameters: [-A number] means the -A option expects a number. [-d yyyy-mm] indicates that the -d option expects us to pass in a date in the format: yyyy-mm like 1980-04

Finally, at the end we see [year] which means that we can pass a year as a parameter

man pages synopsis

echo [OPTION]... [STRING]...

The above synopsis is for the **echo** command, which echoes text back at us.

An ellipsis (...) indicates that one or more of the proceeding operand are allowed:

[OPTION]... means that we can pass more than one option to echo

[STRING]... indicates that we can pass multiple strings to echo. For example, we can run **echo hello** and also **echo hello there you cutie little chicken pot pie**

man pages synopsis

cp [OPTION]... SOURCE DEST

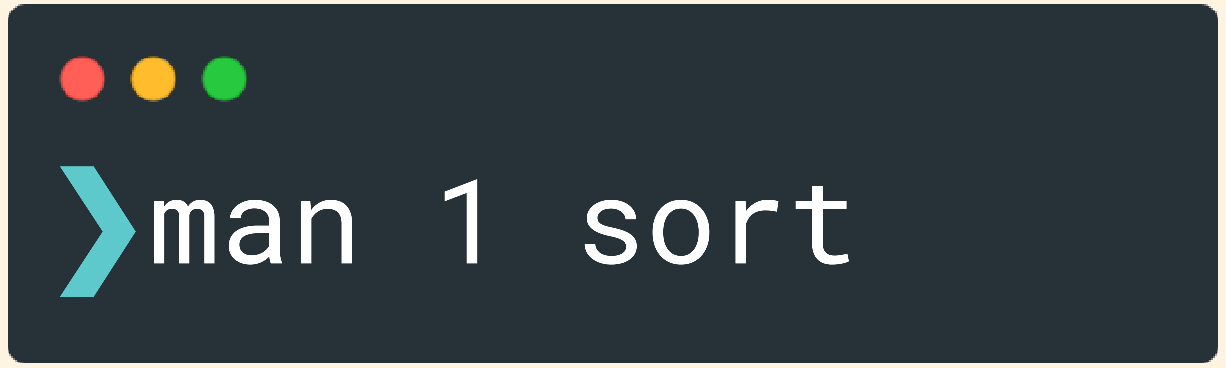
So far, all of the operands we've seen have been optional, but some commands do require certain arguments in order to run. In a man page synopsis, required operands are NOT wrapped in square brackets.

In the above synopsis for the copy (cp) command, we see that we can optionally provide one or more options. SOURCE indicates that we must pass one source, and DEST indicates that we must pass a destination as well. Those two arguments are required.

Manual Sections

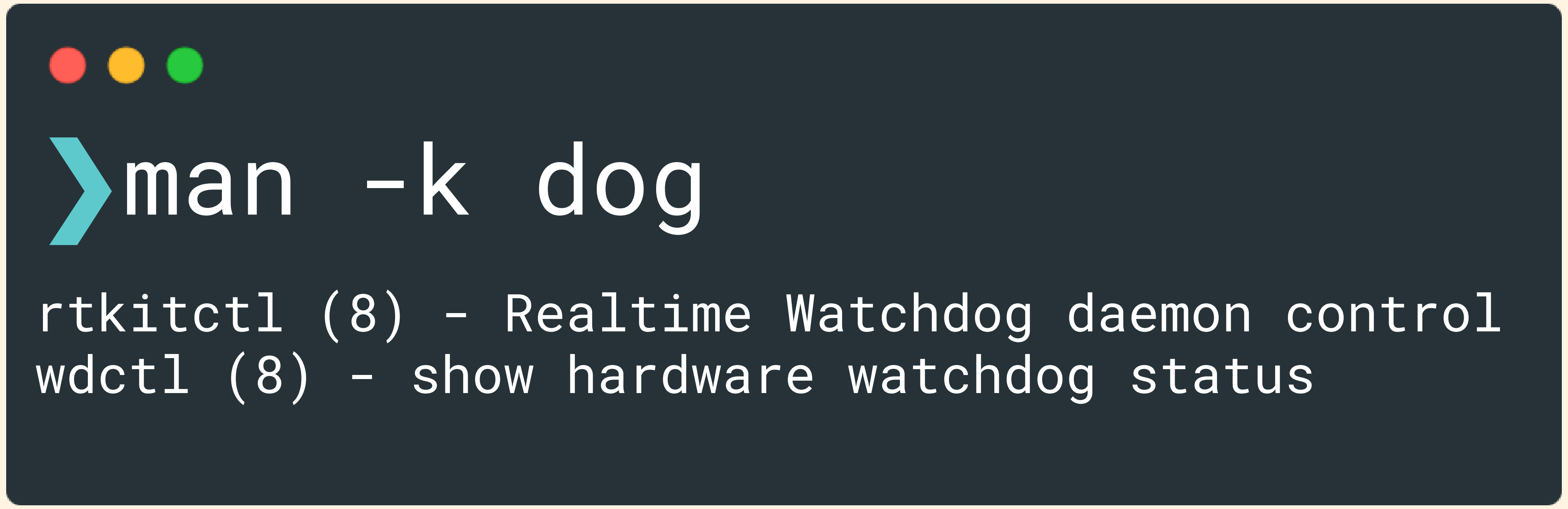
The manual is broken into 8 different sections, each covering a specific topic in depth:

1. User Commands
2. System Calls
3. C Library Functions
4. Special files
5.File forms
6.Games
7.Miscellaneous
8.System admin commands



```
❯man 1 sort
```

Searching The Manual



```
❯man -k dog

rtkitctl (8) - Realtime Watchdog daemon control
wdctl (8) - show hardware watchdog status
```

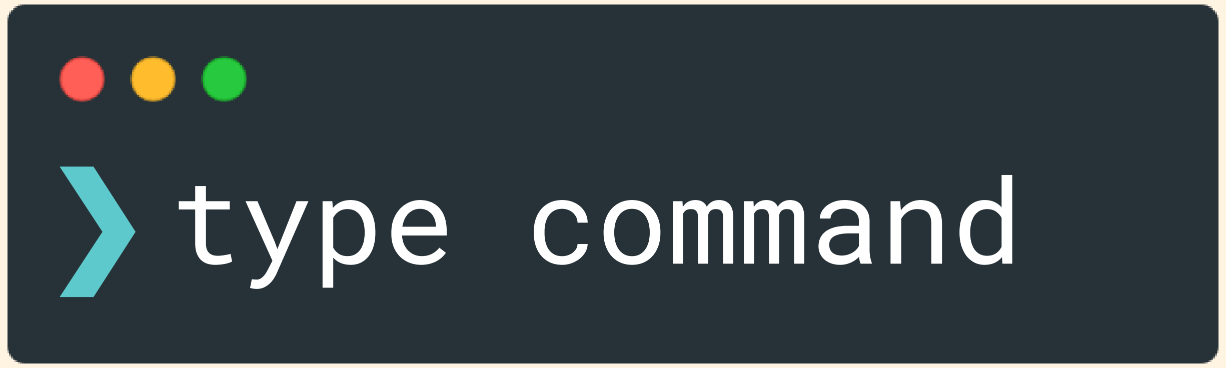
We can search for a term within the manual using the **-k** option.

For example, to search the manual for "dog" we would run **man -k dog**

Types Of Commands

There are really four types of commands:

- An executable program, usually stored in /bin, /usr/bin, or /usr/local/bin. These are compiled binary files (hence bin)
- A built-in shell command. These commands are part of the shell (bash in our case)
- A shell function
- An alias



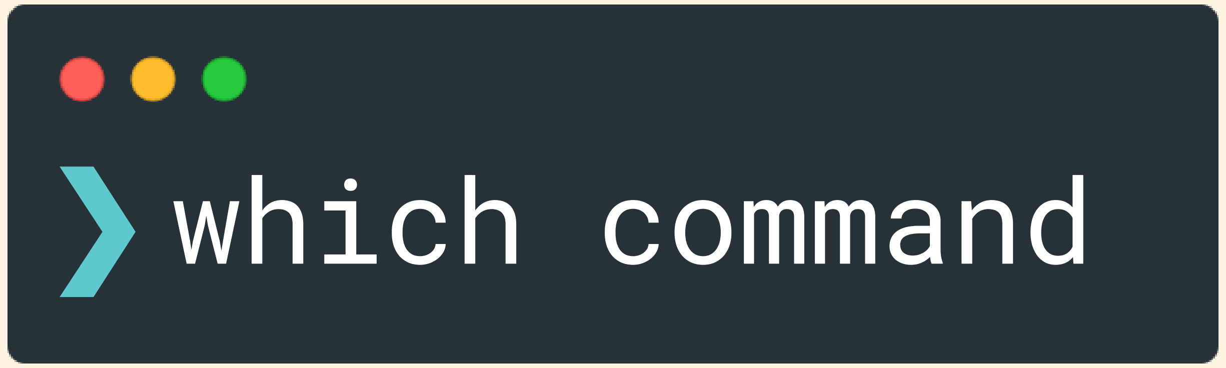
```
❯ type command
```

The type command will tell us...
the type of a command

Which

To find the exact location of an executable, run which command

This only works for executables, not built-in shell commands or aliases.



```
❯ which command
```

Help!

Some commands do not have man pages written for them, because they are commands that are directly built in to the shell.

We can find documentation for those commands using the **help** command.

For example, to learn more about the cd command we would run **help cd**

```
❯ help cd
```