

# Pest Control

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# tiling up windows

- XMonad
- ion3
- ratpoison
- And plenty of others...

[http://en.wikipedia.org/wiki/Tiling\\_window\\_manager](http://en.wikipedia.org/wiki/Tiling_window_manager)

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# shells

- bash
- tcsh
- zsh

# shells

- `bash`
- `tcsch`
- `zsh`

# don't panic!

- `man`
- `info`

```
> man program
```

```
> man -k keyword
```

```
> program -h
```

```
> program --help
```

# don't panic!

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- `info`

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- info

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```
> program --help
```

# meowing from tip to toe

- cat
- head
- tail

```
> cat /vol/wwwlogs/www.doc.ic.ac.uk/access.log
```

```
> head -n 10 /vol/wwwlogs/www.doc.ic.ac.uk/access.log
```

```
> tail -f /vol/wwwlogs/www.doc.ic.ac.uk/*.log
```

# meowing from tip to toe

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```

# in, out, shake it all about

- 0 - Standard Input, `stdin` or `System.in`
- 1 - Standard Output, `stdout` or `System.out`
- 2 - Standard Error, `stderr` or `System.err`

```
> cat -
```

# in, out, shake it all about

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  - 1 - Standard Output, `stdout` or `System.out`
  - 2 - Standard Error, `stderr` or `System.err`
- > `cat -`

## you put your left leg in

- `program < file`
- `program > file`
- `program | program`

```
> cat - > hello.txt
```

```
> ls | head -n 2 > top2Files.txt
```

```
> echo 2 + 2 > /tmp/x
```

```
> cat /tmp/x
```

```
> ghci < /tmp/x
```

## you put your left leg in

- `program < file`
- `program > file`
- `program | program`

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> ls | head -n 2 > top2Files.txt
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```
> echo 2 + 2 > /tmp/x
```

```
> cat /tmp/x
```

```
> ghci < /tmp/x
```

## less

```
> less /vol/wwwhomeslogs/server-error.log
```

```
> ghc -e 'mapM_ print [ x * 2 | x <- [1..100]]' | less
```

## tee

```
> ghc -e 'mapM_ print (let fibs = 0 : 1 :  
    zipWith (+) fibs (tail fibs) in fibs)' | tee /tmp/primes
```

## tr

```
> echo hello | tr 'eo' 'oy'
```

```
> tr -c [:print:] ' ' < /dev/urandom
```

## awk, sort, uniq, wc

```
> cat /vol/wwwhomeslogs/wwwhomes.doc.ic.ac.uk/access.log  
| awk '{print $2}'  
  
> cat /vol/wwwhomeslogs/wwwhomes.doc.ic.ac.uk/access.log  
| awk '$2 ~ /^66/ {print $2}'  
  
> cat /vol/wwwhomeslogs/wwwhomes.doc.ic.ac.uk/access.log  
| awk '$2 ~ /^66/ {print $2}' | sort | uniq -c  
  
> cat /vol/wwwhomeslogs/wwwhomes.doc.ic.ac.uk/access.log  
| awk '$2 ~ /^66/ {print $2}' | sort | uniq | wc -l
```

## find

```
> find /vol/wwwhomeslogs/ -name "*.log"
```

```
> find /vol/wwwhomeslogs/ -name "*.log" -exec wc -l '{} ' ';' 
```

```
> find ~tora/git -maxdepth 2 -type d -name ".git"
```

## grep

```
> grep "tora"  
/vol/wwwhomeslogs/wwwhomes.doc.ic.ac.uk/access.log  
  
> ghc -e 'mapM_ print [1..]' 2>/dev/null | grep '4.4' | head  
  
> grep "main :: IO ()" -l --include="*.hs" -R ~tora/git/endo
```

## sed

```
> man man | sed 's/man/ARGH/g' | less
```

```
> ls /vol/wwwhomeslogs/ | grep server-error  
| sed 's/[^0-9]*//g' | head
```

## shell tricks

```
> echo `find . -name "*.hs"`  
  
> wc -l `find . -name "*.hs"`  
  
> wc -l `find . -name "*.hs"` | sort -nk1  
  
> echo "plot `wc -l \ `find . -name "*.hs"\  
  | sort -nk1`" | gnuplot -p
```

## netcat

```
> nc -l 8080  
> echo "hello!" | nc localhost 8080  
  
> echo -e "GET / HTTP/1.0\n\n"  
  | netcat -q -l www.google.com 80
```

## ssh

```
> ssh shell1.doc.ic.ac.uk  
  
> ssh shell1.doc.ic.ac.uk who  
  
> ssh shell1.doc.ic.ac.uk nc -l 10005  
> ssh -N -L 8080:localhost:10005 shell1.doc.ic.ac.uk  
> echo "hello!" | nc localhost 8080  
  
> ssh -X agile 'cd ~/git/endo ; gitk'
```

## screen

```
> screen -S session
```

```
help - [Ctrl-A ?]
```

```
split - [Ctrl-A S]
```

```
new shell - [Ctrl-A c]
```

```
detach - [Ctrl-A Ctrl-D]
```

```
> screen -dr session
```

```
> screen -x session
```

## latex

```
> cat report.tex
\documentclass{article}
\begin{document}
\title{My First Article}
\author{Tristan Allwood}
\maketitle

\section{Introduction}
This is the start of something wonderful...
\end{document}

> pdflatex report.tex
```

# latex - beamer

```
> cat slides.tex
\documentclass{beamer}
\begin{document}
\title{My Talk}
\author{Tristan Allwood}
\maketitle

\begin{frame}
\frametitle{Introduction}
This is my talk...
\end{frame}
\end{document}

> pdflatex slides.tex
```

# make

```
> cat Makefile
```

```
all: slides.pdf report.pdf
```

```
%.pdf: %.tex
```

```
pdflatex $<
```

```
clean:
```

```
rm -f *.aux *.log *.pdf *.nav *.snm *.toc
```

```
.phony: all clean
```

```
> make
```

```
> make slides.pdf
```

```
> make clean
```

## xpdf

```
> xpdf -remote hi slides.pdf &  
  
> make && xpdf -remote hi -reload
```

# A life without mice?

- **Email:** mutt, pine
- **Web:** w3m, lynx, links2
- **Tiling-WM for console:** dvtm

# Moon buggy

```
> wget
  http://seehuhn.de/media/programs/moon-buggy-1.0.51.tar.gz
> tar -xzf moon-buggy-1.0.51.tar.gz
> cd moon-buggy-1.0.51/
> ./configure --prefix=/tmp/moon && make && make install
> /tmp/moon/bin/moon-buggy
```

Be careful! New moon tonight.

```
> nethack
```