## Simple Movement



## Text Modifications

Delete everything up to ...

| $\mathrm{d}<m v>$ | $\ldots$ the move |
| :--- | :--- |
| $n \mathrm{~d}<m v>$ | $\ldots n$ repetitions of the move |
| D | $\ldots$. the end of the line |
| $n \mathrm{D}$ | $\ldots$ the end of $n$ lines |
| dd | Delete the entire line |
| $n \mathrm{dd}$ | Delete $n$ lines |

" $x$ " (delete) the ...

| $\mathbf{x}$ | ... current character |
| ---: | :--- |
| $n \mathbf{x}$ | ... next $n$ characters (inclusive) |
| $\mathbf{X}$ | ... previous character |
| $n \mathbf{X}$ | ... previous $n$ characters |

Replace ..

| $\mathbf{r} x$ | $\ldots$ the current character with $x$ |
| :---: | :--- |
| $n \mathbf{r} x$ | $\ldots$ the next $n$ characters with $x$ |
| R | ... from the current character on |
| $n \mathbf{R}$ | $\ldots$ from the current character on $(\times n)$ |

Change everything up to ...

| $\mathbf{c}<m v>$ | $\ldots$ the move |
| :--- | :--- |
| $n \mathbf{c}<m v>$ | $\ldots n$ repetitions of the move |
| $\mathbf{C}$ | $\ldots$ the end of $n$ lines |
| $n \mathbf{C}$ | $\ldots$ the end of the line |
| $\mathbf{c} \mathbf{c}$ | Change the entire line |
| $n \mathbf{c} \mathbf{C}$ | Change $n$ lines |

Substitute the ...

| $\mathbf{s}$ | $\ldots$ current character |
| ---: | :--- |
| $n \mathbf{s}$ | $\ldots$ next $n$ characters |
| $\mathbf{S}$ | $\ldots$ entire line |
| $n \mathbf{S}$ | $\ldots$ next $n$ lines |

## Indent/Unindent ...

| >> | ... the current line |
| :---: | :---: |
| $><m v>$ | ... all lines up to the end of the move |
| << | ... the current line |
| $\ll m v>$ | . next $n$ lines |

# vi is Your Friend <br> by Douglas Wilhelm Harder 

## Miscellaneous Useful Commands

| - | Repeat the last command |
| :---: | :---: |
| u | Undo the last change |
| ${ }^{\wedge} \mathrm{R}$ | Redo the last undo |
| U | Undo all changes to current line |
| \% | Find a matching delimiter \{ [ ( ) ] \} |
| ${ }^{\wedge} \mathrm{G}$ | Print the current line and column |
| ${ }^{\wedge} \mathrm{L}$ | Refresh the screen |
| ~ | Change the case of a letter |

## Character Searches

\section*{| -1 | $F$ | $x$ | $T$ | $x$ | $t$ | $x$ | $f$ | $x$ | $;$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |}

Find (in the current line) the

| $\mathbf{f} x$ | $\ldots$ next occurrence of $x$ |
| :---: | :--- |
| $n \mathbf{f x} x$ | $\ldots n$th occurrence of $x$ |
| $\mathbf{t x}$ | $\ldots$ character before $\mathbf{f} x$ |
| $n \mathbf{t x} x$ | $\ldots$ character before $n \mathbf{f} x$ |
| $\mathbf{T x} x$ | $\ldots$ character after $\mathbf{F} x$ |
| $n \mathbf{T x} x$ | $\ldots$ character after $n \mathbf{F} x$ |
| $\mathbf{F} x$ | $\ldots$ previous occurrence of $x$ |
| $n \mathbf{F} x$ | $\ldots n$th prior occurrence of $x$ |
| $;$ | Repeat the previous find |
| , | Repeat in the opposite direction |

## Regular Expression Searches

## Search for the ...

| $/<r e>$ | $\ldots$ next occurrence of $<r e>$ |
| :---: | :--- | :--- |
| $n /<r e>$ | $\ldots n$th occurrence of $<r e>$ |
| $?<r e>$ | $\ldots$ previous occurrence of $<r e>$ |
| $n ?<r e>$ | $\ldots n$th prior occurrence of $<r e>$ |
| n | Repeat the previous search |
| N | Repeat in the opposite direction |

## Default Buffer Modifications

Yank to the buffer everything up to ...

| $\mathbf{Y}<m v>$ | $\ldots$ the move |
| :--- | :--- |
| $n \mathbf{y}<m v>$ | $\ldots n$ repetitions of the move |
| $\mathbf{Y}$ | $\ldots$ the end of the line |
| $n \mathbf{Y}$ | $\ldots$ the end of $n$ lines |
| $\mathbf{Y y}$ | Yank to the buffer the entire line |
| $n \mathbf{y} \mathbf{y}$ | Yank to the buffer $n$ lines |

Any dDxX operation also copies the deleted text into the default buffer.

Put the contents of the default buffer ...
P
$n$
P
P
... after the cursor/line
... after the cursor/line ( $\times_{n}$ )
... before the cursor/line
$n \mathrm{P}$
... before the cursor/line ( $\times n$ )

## Named Buffer Modifications

There are 26 named buffers labeled $\mathbf{a - z}$
Precede any dDyYxx with ...
" ${ }^{\prime}$ A
... to copy into the named buffer
" $A \quad$... to append to the named buffer

Put the contents of a named buffer ...

| " $a \mathrm{p}$ | $\ldots$ after the cursor/line |
| :---: | :--- |
| $n " a \mathrm{p}$ | ... after the cursor/line $(\times n)$ |
| $" a \mathrm{P}$ | .. before the cursorline |
| $n " a \mathrm{P}$ | ... before the cursor/line $(\times n)$ |

## Marking Positions

There are 26 named markers labeled $\mathbf{a - z}$
Mark a position with
$\mathrm{m} a \quad$... to copy into the named buffer
Move to ...

| $a$ | ... the mark $a$ |
| ---: | :--- |
| 'a | ... the start of the line with mark $a$ |
| ${ }^{\prime}$, | ... the last mark |
| ... the start of the line with the last mark |  |

## Movement Commands

| - | Move to the start of the previous line |
| ---: | :--- |
| $n-$ | Move to the start of the $n$th previous line |
| + | Move to the start of the following line |
| $n+$ | Move to the start of the $n$th following line |
| $\mathbf{H}$ | Move to the top of the screen |
| $n \mathbf{H}$ | Move to the $n$th line from the top |
| L | Move to the bottom (lower) of the screen |
| $n \mathbf{L}$ | Move to the $n$th line from the bottom |
| $\mathbf{G}$ | Move to the end of the file |
| $n \mathbf{G}$ | Move to the $n$th line |
| $n \boldsymbol{I}$ | Move to the $n$th column |

## Scrolling Commands

| $\wedge^{\wedge} \mathrm{B}$ | Scroll back one screen |
| :---: | :--- |
| $n^{\wedge} \mathrm{B}$ | Scroll back $n$ screens |
| $\wedge{ }^{\wedge} \mathrm{U}$ | Scroll up (up to) one-half a screen |
| $n^{\wedge} \mathrm{U}$ | Scroll up $n$ lines (and remember $n$ ) |
| $\wedge{ }^{\wedge} \mathrm{Y}$ | Shift screen down by one line |
| $n^{\wedge} \mathrm{Y}$ | Shift screen down by $n$ line |
| $\mathbf{z} \mathbf{z}$ | Move cursor to top of the screen |
| $\mathbf{z}$ | Move cursor to the middle of the screen |
| $\mathbf{z -}$ | Move cursor to the bottom of the screen |
| $\wedge{ }^{\wedge} \mathrm{E}$ | Shift screen up by one line |
| $n^{\wedge} \mathrm{E}$ | Shift screen up by $n$ line |
| $\wedge^{\wedge} \mathrm{D}$ | Scroll down (up to) one-half a screen |
| $n^{\wedge} \mathrm{D}$ | Scroll down $n$ lines (and remember $n$ ) |
| $\wedge^{\wedge} \mathrm{F}$ | Scroll forward one screen |
| $n^{\wedge} \mathrm{F}$ | Scroll forward $n$ screens |

## Regular Expressions

$a \quad$ A letter or number matches itself The period matches anything
[ $x y z$ ] Matches any one character inside [ ]
[ ^xyz] Matches any character not in [ ]
[a-z] Short cut for [abcde...xyz]
[^0-9] Short cut for [^0123456789]
$<r 1><r 2>$ Matches <r1> followed by $<r 2>$
$<r e>* \quad$ Matches any number (also 0 ) of $<r e>$
$<r e><r e>*$ Matches at least one of $<r e>$
$\backslash \ll r e>\quad$ Matches $<r e>$ at the start of a word
$<r e>\backslash>\quad$ Matches <re> at the end of a word
$\wedge \quad \$ \quad$ Matches the start and end of a line

## Search and Replace

Replace the first instance of dog with cat on the current line $\quad: s / d o g / c a t$
Replace all instances of dog with cat on the current line
:s/dog/cat/g
Replace all instances of $1 / 2$ with $1 / 3$ on the
current line
: s-1/2-1/3-g $: s / 1 \backslash / 2 / 1 \backslash / 3 / g$
Extend the scope beyond the current line:
: <scope>s/dog/cat
where <scope> is one of
\% All lines in the file
. , \$ All lines after and including the current .,.$+n$ The current line and the next $n$ lines

## File Manipulation

Session File Manipulation

| $: w$ | write (save) the file |
| :--- | :--- |
| $: w$ filename | write to the specified file |
| $: w \%$.new | appended. new to current name |
| $: w!$ filename overwrite the specified file |  |
| $: q$ |  |
| $: q!$ | quit the session |
| $: w q$ | quit and do not save the session |
|  |  |

Multiple-File Manipulation

| $: n$ | go to the next file |
| :--- | :--- |
| $: n!$ | go to the next file without saving |
| :wn | write the file and go to the next file |
| $: N$ | go to the previous file |
| $: N!$ | go to the previous file without saving |
| $: w N$ | write the file and go to the previous file |

## Common Command Examples

xp transpose two characters
ddp swap two lines
$\%$ move to the next delimiter in this line $\{[()]\}$
cw change the rest of the word
c2w change the rest of the current word and the next
4dd delete four lines

