## **GNU Emacs Reference Card**

(for version 20)

## **Starting Emacs**

To enter GNU Emacs 20, just type its name: emacs To read in a file to edit, see Files, below.

## **Leaving Emacs**

suspend Emacs (or iconify it under X)	C-z
exit Emacs permanently	C-x C-c

#### Files

read a file into Emacs	C-x C-f
save a file back to disk	C-x C-s
save all files	C-x s
insert contents of another file into this buffer	C-x i
replace this file with the file you really want	C-x C-v
write buffer to a specified file	C-x C-w
version control checkin/checkout	C-x C-q

## Getting Help

The help system is simple. Type C-h (or F1) and follow the directions. If you are a first-time user, type C-h t for a tutorial.

remove help window scroll help window	C-x 1 C-M-v
a propos: show commands matching a string show the function a key runs describe a function get mode-specific information	C-h a C-h c C-h f C-h m

## **Error Recovery**

abort partially typed or executing comma	and	C-g
recover a file lost by a system crash	M-x	recover-file
undo an unwanted change		C-x u or C
restore a buffer to its original contents	M-x	revert-buffer
redraw garbaged screen		C-1

## **Incremental Search**

search forward	C-s
search backward	C-r
regular expression search	C-M-s
reverse regular expression search	C-M-r
select previous search string	M-p
select next later search string	M-n
exit incremental search	RET
undo effect of last character	DEL
abort current search	C-g

Use C-s or C-r again to repeat the search in either direction. If Emacs is still searching, C-g cancels only the part not done.

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#### Motion

entity to move over character word line go to line beginning (or end) sentence paragraph page sexp function	backwa C-b M-b C-p C-a M-a M-{ C-x [ C-M-b C-M-a	C M C C M M	orward -f -f -f -n -e -e
go to buffer beginning (or end)	M-<	M	[->
scroll to next screen scroll to previous screen scroll left scroll right scroll current line to center of screen		C-v M-v C-x < C-x >	•

### Killing and Deleting

entity to kill character (delete, not kill) word line (to end of) sentence sexp	backward DEL M-DEL M-0 C-k C-x DEL M C-M-k	C-d M-d C-k M-k
kill <b>region</b> copy region to kill ring kill through next occurrence of <i>char</i> yank back last thing killed replace last yank with previous kill	C-w M-w M-z C-y M-y	char

## Marking

set mark here exchange point and mark	C-@ or C-SPC C-x C-x
set mark arg words away	M-0
mark <b>paragraph</b>	M-h
mark <b>page</b>	C-x C-p
mark <b>sexp</b>	C-M-@
mark function	C-M-h
mark entire <b>buffer</b>	C-x h

# **Query Replace**

interactively replace a text string using regular expressions	M-% M-x query-replace-regexp
Valid responses in query-replace m	node are
replace this one, go on to next	SPC
replace this one, don't move	,
skip to next without replacing replace all remaining matches	DEL I
back up to the previous match	•
exit query-replace	RET
enter recursive edit (C-M-c to exit)	C-r

### Multiple Windows

When two commands are shown, the	second is for "o	ther frame.
delete all other windows	C-x	1
split window, above and below	C-x 2	C-x 5 2
delete this window	C-x 0	C-x 5 0
split window, side by side	C-x	3
scroll other window	C-M-	-v
switch cursor to another window	C-x o	C-x 5 o
select buffer in other window	C-x 4 b	C-x 5 b
display buffer in other window	C-x 4 C-o	C-x 5 C-c
find file in other window	C-x 4 f	C-x 5 f
find file read-only in other window	C-x 4 r	C-x 5 r
run Dired in other window	C-x 4 d	C-x 5 d
find tag in other window	C-x 4 .	C-x 5 .
grow window taller	C-x	^
shrink window narrower	C-x	{
grow window wider	C-x	}

## Formatting

indent current line (mode-dependent)	TAB
indent region (mode-dependent)	C-M-\
indent sexp (mode-dependent)	C-M-q
indent region rigidly arg columns	C-x TAB
insert newline after point move rest of line vertically down delete blank lines around point join line with previous (with arg, next) delete all white space around point put exactly one space at point	C-o C-M-o C-x C-o M-^ M-\ M-SPC
fill paragraph	M-q
set fill column	C-x f
set prefix each line starts with	C-x .
set face	M-g

## Case Change

uppercase word lowercase word	M-u M-1
capitalize word	M-c
uppercase region	C-x C-u
lowercase region	C-x C-1

### The Minibuffer

The following keys are defined in the minibuffer.

complete as much as possible complete up to one word complete and execute show possible completions fetch previous minibuffer input fetch later minibuffer input or default regexp search backward through history regexp search forward through history	TAB SPC RET ? M-p M-n M-r M-r
regexp search forward through history abort command	M-s C-g

Type C-x ESC ESC to edit and repeat the last command that used the minibuffer. Type F10 to activate the menu bar using the minibuffer.

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#### Buffers

select another buffer	C-x b
list all buffers	C-x C-b
kill a buffer	C-x k

### Transposing

transpose characters	C-t
transpose words	M-t
transpose lines	C-x C-t
transpose sexps	C-M-t

## **Spelling Check**

check spelling of current word	M-\$
check spelling of all words in region	M-x ispell-region
check spelling of entire buffer	M-x ispell-buffer

## Tags

find a tag (a definition)	M
find next occurrence of tag	C-u M
specify a new tags file	M-x visit-tags-table
regexp search on all files in tags table	M-x tags-search
run query-replace on all the files M	-x tags-query-replace
continue last tags search or query-repla	ace M-,

#### Shells

execute a shell command	M-!
run a shell command on the region	M-
filter region through a shell command	C-u M-
start a shell in window *shell*	M-x shell

## Rectangles

copy rectangle to register	C-x r r
kill rectangle	C-x r k
yank rectangle	С-х г у
open rectangle, shifting text right	C-x r o
blank out rectangle	C-x r c
prefix each line with a string	C-x r t

### **Abbrevs**

add global abbrev add mode-local abbrev	C-x a g C-x a l
add global expansion for this abbrev	C-x a i g
add mode-local expansion for this abbrev	C-x a i l
explicitly expand abbrev	C-x a e
expand previous word dynamically	M-/

### **Regular Expressions**

any single character except	a newline	. (dot)
zero or more repeats		*
one or more repeats		+
zero or one repeat		?
quote regular expression sp	ecial character $c$	$\backslash c$
alternative ("or")		\1
grouping		\( \)
same text as nth group		$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
at word break		\b
not at word break		<b>\</b> B
entity	match start	match end
line	^	\$
word	\<	\>
buffer	\'	\',
class of characters	match these	match others
explicit set	[ ]	[^ ]
word-syntax character	\w	\W
character with syntax $c$	$\scalebox{1}{sc}$	$\Sc$

#### **International Character Sets**

specify principal language M-	x set-language-environment
show all input methods	M-x list-input-methods
enable or disable input method	C-/
set coding system for next comm	and C-x RET c
show all coding systems	M-x list-coding-systems
choose preferred coding system	M-x prefer-coding-system

#### Info

enter the Info documentation reader find specified function or variable in Info	C-h i C-h C-i
Moving within a node:	
scroll forward scroll reverse beginning of node	SPC DEL . (dot)
Moving between nodes:	
next node previous node move up select menu item by name select nth menu item by number (1–9) follow cross reference (return with 1) return to last node you saw return to directory node go to any node by name	n p u m f 1 d g
Other:	
run Info <b>tutorial quit</b> Info search nodes for regexp	h q M-s

## Registers

5	save region in register	C-x	r	S
j	nsert register contents into buffer	C-x	r	i
5	save value of point in register	C-x	r	SPC
j	ump to point saved in register	C-x	r	j

### **Keyboard Macros**

start defining a keyboard macro	C-x (
end keyboard macro definition	C-x )
execute last-defined keyboard ma	cro C-x e
append to last keyboard macro	C-u C-x (
name last keyboard macro	M-x name-last-kbd-macro
insert Lisp definition in buffer	M-x insert-kbd-macro

## Commands Dealing with Emacs Lisp

eval <b>sexp</b> before point		C-x C-e
eval current <b>defun</b>		C-M-x
eval region	M-x	eval-region
read and eval minibuffer		M-:
load from standard system directory	M-x	load-library

### Simple Customization

```
customize variables and faces M-x customize
Making global key bindings in Emacs Lisp (examples):
(global-set-key "\C-cg" 'goto-line)
(global-set-key "\M-#" 'query-replace-regexp)
```

## Writing Commands

(defun command-name (args)

The interactive spec says how to read arguments interactively. Type  ${\tt C-h}$  f interactive for more details.

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