GNU Emacs Reference Card

(for version 19)

Starting Emacs

To enter GNU Emacs 19, 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

Getting Help

The Help system is simple. Type `C-h` and follow the directions. If you are a first-time user, type `C-h t` for a tutorial.

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

Error Recovery

abort partially typed or executing command	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-l

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.

Motion

entity to move over	backward	forward
character	C-b	C-f
word	M-b	M-f
line	C-p	C-n
go to line beginning (or end)	C-a	C-e
sentence	M-a	M-e
paragraph	M--	M-"
page	C-x [	C-x]
sexp	C-M-b	C-M-f
function	C-M-a	C-M-e
go to buffer beginning (or end)	M-<	M->

scroll to next screen	C-v
scroll to previous screen	M-v
scroll left	C-x <
scroll right	C-x >
scroll current line to center of screen	C-u C-l

Killing and Deleting

entity to kill	backward	forward
character (delete, not kill)	DEL	C-d
word	M-DEL	M-d
line (to end of)	M-0 C-k	C-k
sentence	C-x DEL	M-k
sexp	M-- C-M-k	C-M-k

kill region	C-w
copy region to kill ring	M-w
kill through next occurrence of char	M-z char
yank back last thing killed	C-y
replace last yank with previous kill	M-y

Marking

set mark here	C-@ or C-SPC
exchange point and mark	C-x C-x
set mark arg words away	M-@
mark paragraph	M-h
mark page	C-x C-p

mark sexp	C-M-@
mark function	C-M-h
mark entire buffer	C-x h

Query Replace

interactively replace a text string	M-%
using regular expressions	M-x query-replace-regexp

Valid responses in query-replace mode are:

replace this one, go on to next	SPC
replace this one, don't move	,
skip to next without replacing	DEL
replace all remaining matches	!
back up to the previous match	^
exit query-replace	ESC
enter recursive edit (C-M-c to exit)	C-r

Multiple Windows

delete all other windows	C-x 1
delete this window	C-x 0
split window in two vertically	C-x 2
split window in two horizontally	C-x 3
scroll other window	C-M-v
switch cursor to another window	C-x o
shrink window shorter	M-x shrink-window
grow window taller	C-x ^
shrink window narrower	C-x -
grow window wider	C-x "
select buffer in other window	C-x 4 b
display buffer in other window	C-x 4 C-o
find file in other window	C-x 4 f
find file read-only in other window	C-x 4 r
run Dired in other window	C-x 4 d
find tag in other window	C-x 4 .

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	C-o
move rest of line vertically down	C-M-o
delete blank lines around point	C-x C-o
join line with previous (with arg, next)	M-^
delete all white space around point	M-"
put exactly one space at point	M-SPC
fill paragraph	M-q

set fill column	C-x f
set prefix each line starts with	C-x .

Case Change

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

The Minibuffer

The following keys are defined in the minibuffer:

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

Type `C-x ESC ESC` to edit and repeat the last command that used the minibuffer. The following keys are then defined:

previous minibuffer command	M-p
next minibuffer command	M-n

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-replace	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	C-x r y
open rectangle, shifting text right	C-x r o
blank out rectangle	M-x clear-rectangle
prefix each line with a string	M-x string-rectangle

Abbrevs

add global abbrev	C-x a g
add mode-local abbrev	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	?
any character in the set	[: : :]
any character not in the set	[^ : : :]
beginning of line	^
end of line	$
quote a special character c	"c
alternative ("or")	"_
grouping	"(: : :")
nth group	"n
beginning of buffer	"`
end of buffer	"'
word break	"b
not beginning or end of word	"B
beginning of word	"<
end of word	">

any word-syntax character	"w
any non-word-syntax character	"W
character with syntax c	"sc
character with syntax not c	"Sc

Registers

save region in register	C-x r s
insert register contents into buffer	C-x r i
save value of point in register	C-x r SPC
jump to point saved in register	C-x r j

Info

enter the Info documentation reader	C-h i

Moving within a node:

scroll forward	SPC
scroll reverse	DEL
beginning of node	. (dot)

Moving between nodes:

next node	n
previous node	p
move up	u
select menu item by name	m
select nth menu item by number (1-5)	n
follow cross reference (return with l)	f
return to last node you saw	l
return to directory node	d
go to any node by name	g

Other:

run Info tutorial	h
list Info commands	?
quit Info	q
search nodes for regexp	s

Keyboard Macros

start defining a keyboard macro	C-x (
end keyboard macro definition	C-x)
execute last-defined keyboard macro	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 sexp before point	C-x C-e

eval current defun	C-M-x
eval region	M-x eval-region
eval entire buffer	M-x eval-current-buffer
read and eval minibuffer	M-ESC
re-execute last minibuffer command	C-x ESC ESC
read and eval Emacs Lisp file	M-x load-file
load from standard system directory	M-x load-library

Simple Customization

Here are some examples of binding global keys in Emacs Lisp. Note that you cannot say `""M-#"`; you must say `""e#"`.

```
(global-set-key ""C-cg" 'goto-line)
(global-set-key ""C-x"C-k" 'kill-region)
(global-set-key ""e#" 'query-replace-regexp)
```

An example of setting a variable in Emacs Lisp:

```
(setq backup-by-copying-when-linked t)
```

Writing Commands

```
(defun command-name  (args)
   "documentation"
   (interactive "template")
   body)
```

An example:

```
(defun this-line-to-top-of-window (line)
   "Reposition line point is on to top of window.
With ARG, put point on line ARG.
Negative counts from bottom."
   (interactive "P")
   (recenter (if (null line)
                   0
                 (prefix-numeric-value line))))
```

The argument to interactive is a string specifying how to get the arguments when the function is called interactively. Type `C-h f` interactive for more information.


```
Copyright c 1993 Free Software Foundation, Inc.
   designed by Stephen Gildea, May 1993 v2.0
   for GNU Emacs version 19 on Unix systems
```

Permission is granted to make and distribute copies of this card provided the copyright notice and this permission notice are preserved on all copies.

For copies of the GNU Emacs manual, write to the Free Software Foundation, Inc., 675 Massachusetts Ave, Cambridge MA 02139.