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.