

Princeton University

COS 217: Introduction to Programming Systems

The Emacs Editor

This reference sheet assumes that Emacs is configured using the .emacs file provided to COS 217 students.

In Emacs all work is accomplished by calling functions. To call a function, type "ESC x *function*".

Many function calls are bound to keystrokes. These tables show some keystroke bindings. Bindings in **boldface** are the most commonly used.

Moving the Point

Key	Function	Description
→	forward-char	Move the point forward one character
←	backward-char	Move the point backward one character
↓	next-line	Move the point to the next line
↑	previous-line	Move the point to the previous line
C-f	forward-char	Move the point forward one character
C-b	backward-char	Move the point backward one character
C-n	next-line	Move the point to the next line
C-p	previous-line	Move the point to the previous line
ESC f	forward-word	Move the point to the next word
ESC b	backward-word	Move the point to the previous word
Home	beginning-of-line	Move the point to the beginning of the line (PuTTY only)
End	end-of-line	Move the point to the end of the line (PuTTY only)
C-a	beginning-of-line	Move the point to the beginning of the line
C-e	end-of-line	Move the point to the end of the line
ESC a	c-beginning-of-statement	Move the point to the beginning of the C statement
ESC e	c-end-of-statement	Move the point to the end of the C statement
PageDn	scroll-up	Move the point to the previous page (PuTTY only)
PageUp	scroll-down	Move the point to the next page (PuTTY only)
C-v	scroll-up	Move the point to the previous page
ESC v	scroll-down	Move the point to the next page
ESC <	beginning-of-buffer	Move the point to the beginning of the buffer
ESC >	end-of-buffer	Move the point to the end of the buffer
ESC C-a	beginning-of-defun	Move the point to the beginning of the C function
ESC C-e	end-of-defun	Move the point to the end of the C function
C-x line	goto-line	Move the point to the line whose number is <i>line</i>

Inserting and Deleting

Key	Function	Description
BSP	c-electric-backspace	Delete the character before the point
ESC BSP	backward-kill-word	Delete the characters from the point to the beginning of the word
C-d	c-electric-delete-forward	Delete the character at the point
C-k	kill-line	Cut the current line
C-SP	set-mark-command	Set the mark at the point
C-x C-x	exchange-point-and-mark	Exchange the mark and the point
C-x h	mark-whole-buffer	Set the point at the beginning and the mark at the end of the buffer
C-w	kill-region	Cut the region denoted by the mark and the point
ESC w	kill-ring-save	Copy the region denoted by the mark and the point
C-y	yank	Paste the previously cut/copied region at the point
C-c .	c-set-style	Set the C indentation style to the specified one
TAB	c-indent-command	Indent the current line of the C program
ESC C-\	indent-region	Indent the region of the C program denoted by the mark and the point
C-x p	indent-all	Indent all lines of the C program (i.e. indent the program perfectly)

Searching and Replacing

Key	Function	Description
C-s <i>string</i>	isearch-forward	Search forward for <i>string</i>
C-r <i>string</i>	isearch-backward	Search backward for <i>string</i>
ESC % <i>old new</i>	query-replace	Replace the <i>old</i> string with the <i>new</i> one y => replace n => skip ! => replace all q => quit

Reading, Writing, and Exiting

Key	Function	Description
C-x C-f <i>file</i>	find-file	Load the specified file into a buffer
C-x C-r <i>file</i>	find-file-read-only	Load the specified file into a buffer for read only
C-x C-s	save-buffer	Save the current buffer to its file
C-x C-w <i>file</i>	write-file	Write the current buffer to a specified file
C-x C-q	vc-toggle-read-only	Toggle the current buffer between read-only and read/write
C-x C-c	save-buffers-kill-emacs	Save all buffers and exit xemacs

Managing Windows and Buffers

Key	Function	Description
C-x 2	split-window-vertically	Split the current window into two windows arranged vertically
C-x o	other-window	Move the point to the other window
C-x 3	split-window-horizontally	Split the current window into two windows arranged horizontally
C-x 0	delete-window	“Undisplay” the current window
C-x 1	delete-other-windows	“Undisplay” all windows except the current one
C-x C-b	list-buffers	Display a new window listing all buffers
C-x b <i>file</i>	switch-to-buffer	Load <i>file</i> into a buffer if necessary, and then display that buffer in the current window

Compiling and Debugging

Key	Function	Description
	compile <i>command</i>	Build the program using <i>command</i>
	gdb executablefile	Launch the GDB debugger to debug executablefile

Miscellaneous

Key	Function	Description
C-x u	undo	Undo the previous change
C-_	undo	Undo the previous change
C-g	keyboard-quit	Abort the multi-keystroke command
C-h	help-command	Access the Emacs help system
ESC `	tmm-menubar	Access the Emacs menu