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The GNU coding standards, last updated August 18, 2005.

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6	Documenting Programs	40
6.1	GNU Manuals	40
6.2	Doc Strings and Manuals	41
6.3	Manual Structure Details	42
6.4	License for Manuals	42
6.5	Manual Credits	42
6.6	Printed Manuals	43
6.7	The NEWS File	43
6.8	Change Logs	43
6.8.1	Change Log Concepts	43
6.8.2	Style of Change Logs	44
6.8.3	Simple Changes	45
6.8.4	Conditional Changes	

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The standard extensibility interpreter for GNU software is GUILE, which implements the language Scheme (an especially clean and simple dialect of Lisp). <http://www.gnu.org/software/guile/>. We don't reject programs written in other "scripting languages" such as Perl and Python, but using GUILE is very important for the

If these require the GNU compiler, then no one can compile them without having them installed already. That would be extremely troublesome in certain cases.

3.4 Standard C and Pre-Standard C

1989 Standard C is widespread enough now that it is ok to use its features in new programs.


```
fd = open(filename, O_WRONLY | O_CREAT | O_EXCL, 0600);
```

or by using the `mkstemp` function from `libiberty`.

In `bash`, use `set -C` to avoid this problem.

4.2 Library Behavior

Try to make library functions reentrant. If they need to do dynamic storage allocation, at least try to avoid any nonreentrancy aside from that of `malloc` itself.

Here are certain name conventions for libraries, to avoid name conflicts.

Choose a name prefix for the library, more than two characters long. All external function

program: source-file-name: l i n e n o : message

when there is an appropriate source file, or like this:

program: message

when there is no relevant source file.

If you want to mention the column number, use this format:

program: source-file-name: l i n e n o : c o l u m n : message

Write the word "Copyright" exactly like that, in English. Do not translate it into another language. International treaties recognize wordEs word

'auto-reference'

'-A' in ptx.

'avoid-wraps'

'-n' in wdiff.

'background'

For server programs, run in the background.

'backward-search'

'-B' in ctags.

'basename'

'-f' in shar.

'batch'

Used in GDB.

'baud'

Used in GDB.

'before'

'-b' in .tacground.

'binary' '-b' in cpio and diff.

'bits-per-code'

'-b' in shar.

'block-size'

'concatenate'
 '-A' in tar.

'confirmation'
 '-w' in tar.

'context' Used in diff.

'copyleft'
 '-W copyleft' in gawk.

'copyright'
 '-C' in ptx, recode, and wdiff; '-W copyright' in gawk.

'core' Used in GDB.

'count' '-q' in who.

'count-links'
 '-l' in du.

'create' Used in tar and cpio.

'cut-mark'
 '-c' in shar.

'cxref' '-x' in ctags.

'date' '-d' in touch.

'debug' '-d' in Make and m4; '-t' in Bison.

'define' '-D' in m4.

'defines' '-d' in Bison and ctags.

'delete' '-D' in tar.

'dereference'
 '-L' in chgrp, chown, cpio, du, ls, and tar.

'dereference-args'
 '-D' in du.

'device'

'fatal -warnings'

'-E' in m4.

'file' '-f' in info, gawk, Make, mt, and tar; '

'gzi p' '-z' in tar and shar.

'hashsi ze'
 '-H' in m4.

'header' '-h' in obj dump and recode

'headi ng

'include' '-i' in etags; '-l' in m4.

'include-dir'
'-l' in Make.

'incremental'
'-G' in tar.

'info' '-i', '-l', and '-m' in Finger.

'init-file'
In some programs, specify the name of the file to read as the user's init file.

'initial' '-i' in expand.

'initial-tab'
'-T' in diff.

'inode' '-i' in ls.

'interactive'
'-i' in cp, ln, mv, rm; '-e' in m4; '-p' in xargs; '-w' in tar.

'intermix-type'
'-p' in shar.

'iso-8601'
Used in date

'jobs' '-j' in Make.

'just-print'
'-n' in Make.

'keep-going'
'-k' in Make.

'keep-files'
'-k' in csplit.

'kilobytes'
'-k' in du and ls.

'language'
'-l' in etags.

'less-mode'
'-l' in wdiff.

'level-for-gzip'
'-g' in shar.

'line-bytes'
'-C' in split.

'lines' Used in split, head, and tail.

'link' '-l' in cpio.

'only-time'
'-F' in

'print' '-l' in diff.

'print-chars'
 '-L' in cmp.

'print-data-base'
 '-p' in Make.

'print-directory'
 '-w' in Make.

'print-file-name'
 '-o' in nm.

'print-symdefs'
 '-s' in nm.

'printer' '-p' in wdiff.

'prompt' '-p' in ed.

'proxy' Specify an HTTP proxy.

'query-user'
 '-X' in shar.

'question'
 '-q' in Make.

'quiet' Used in many programs to inhibit the usual output. Every program accepting
 '--quiet' should accept '--silent'

'references'

'show-ends'

,


```
if (foo)
    ...
else
{
    if (bar)
        ...
}
```

You might want to make sure that none of the file names would conflict the files were loaded onto an MS-DOS file system whth shortens the names. You can use the program doschk to test for this.

Some GNU programs were designed to limit themselves to file names of 14 haracters


```
FILE *  
xfopen (char const *name)  
{  
    FILE *fp = fopen (name, "r");  
    if (! fp)  
        error (1, errno, "cannot read %s", name);  
    return fp;  
}
```


Here we assume that HAVE_STRCHR and HAVE_STRRCHR are macros defined in systems

A similar problem appears at the level of sentence structure with this code:

```
printf("# Implicit rule search has%s been done.\n",  
       f->tried_implicit ? "" : " not");
```

Adding gettext calls to this code cannot give correct results for all languages, because negation in some languages requires adding words at more than one place in the sentence. By contrast, adding gettext calls does the job straightforwardly if the code starts out like this:

```
printf(f->tried_implicit  
       ? "# Implicit rule search has been done.\n",  
       : "# Implicit rule search has not been done.\n");
```

5.9 Character Set

The text describing a function or variable in a manual must not stand alone; it appears in the context of a section or subsection. Other text at the beginning of the section should

6.6 Printed Manuals

2002-07-14 John Doe <j.doe@gnu.org>

* sewing.c: Make it sew.

rather than this:

2002-07-14 Usual Maintainer <usual@gnu.org>

* sewing.c: Make it sew. Patch by j.doe@gnu.org.

6.10 Reading other Manuals


```
$(CC) -c $(CPPFLAGS) $(ALL_CFLAGS) $<
```

Do include the '-g' option in CFLAGS

Running ‘

To help make users aware of this, the commands for the special maintainer-clean target should start with these two:

```
@echo 'This command is intended for maintainers to use; it'  
@echo 'deletes files that may need special tools to rebuild.'
```

'TAGS

normal installation commands. But installing the binary package does need to execute the

how to use your free program with it, while people who don't already use the proprietary program will not see anything to lead them to take an interest in it.

If a non-free program or system is obscure in your program's domain, your program should not mention or support it at all, since doing so would tend to popularize the non-

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E

encodings

syntactic conventions 31

T

table of long options 12

temporary files 7

temporary variables 32

'texinfo.tex', in a distribution 64

TMPDIR environment variable 7

trademarks 2

W

where to obtain standards.texi