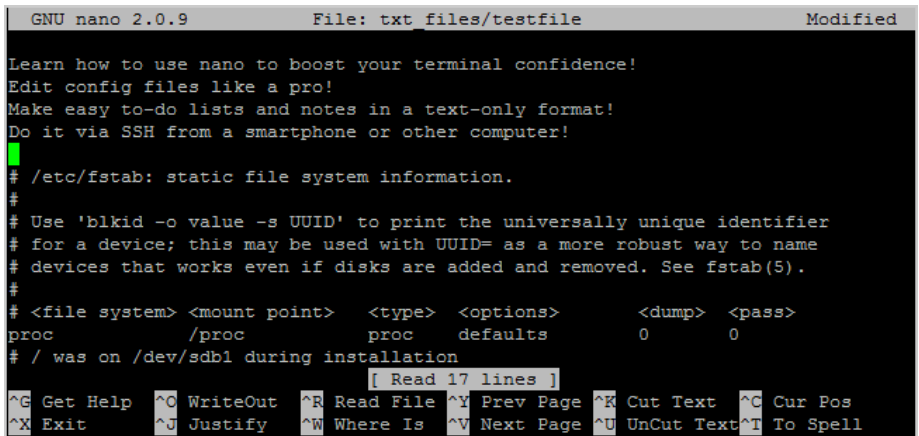


The Beginner's Guide to Nano, the Linux Command-Line Text Editor



```
GNU nano 2.0.9 File: txt_files/testfile Modified

Learn how to use nano to boost your terminal confidence!
Edit config files like a pro!
Make easy to-do lists and notes in a text-only format!
Do it via SSH from a smartphone or other computer!

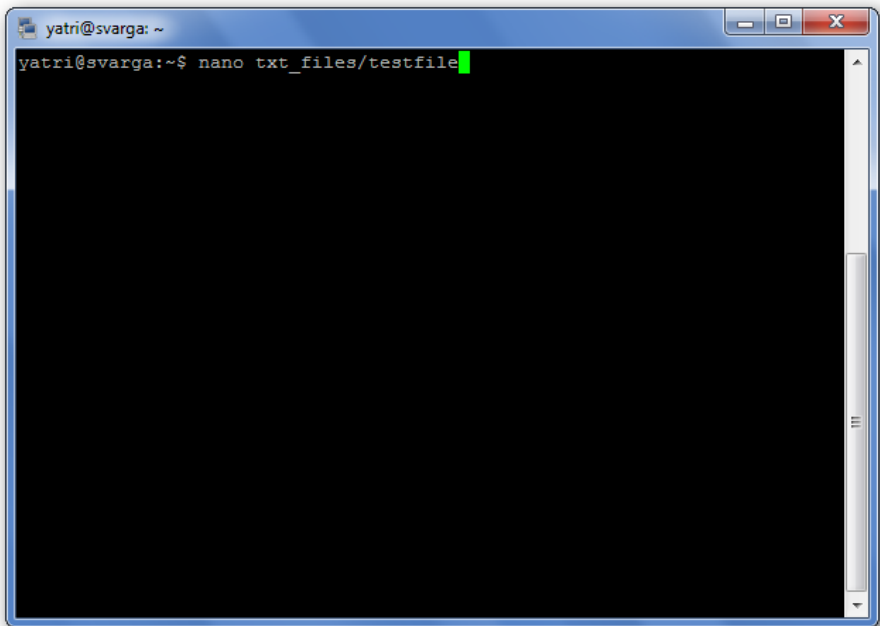
# /etc/fstab: static file system information.
#
# Use 'blkid -o value -s UUID' to print the universally unique identifier
# for a device; this may be used with UUID= as a more robust way to name
# devices that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options> <dump> <pass>
proc /proc proc defaults 0 0
# / was on /dev/sdb1 during installation

[ Read 17 lines ]
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell
```

New to the Linux command-line? Confused by all of the other advanced text editors? How-To Geek's got your back with this tutorial to Nano, a simple text-editor that's very newbie-friendly.

When getting used to the command-line, Linux novices are often put off by other, more advanced text editors such as vim and emacs. While they are excellent programs, they do have a bit of a learning curve. Enter Nano, an easy-to-use text editor that proves itself versatile and simple. Nano is installed by default in Ubuntu and many other Linux distros and works well in conjunction with sudo, which is why we love it so much.

Running Nano

A screenshot of a terminal window with a blue title bar. The title bar contains the text 'yatri@svarga: ~' and standard window control buttons (minimize, maximize, close). The terminal content shows the command 'nano txt_files/testfile' being entered at the prompt 'yatri@svarga:~\$'. A green cursor is visible at the end of the command. The rest of the terminal area is black.

You can run nano in two ways. To open nano with an empty buffer, just type in “nano” at the command prompt.

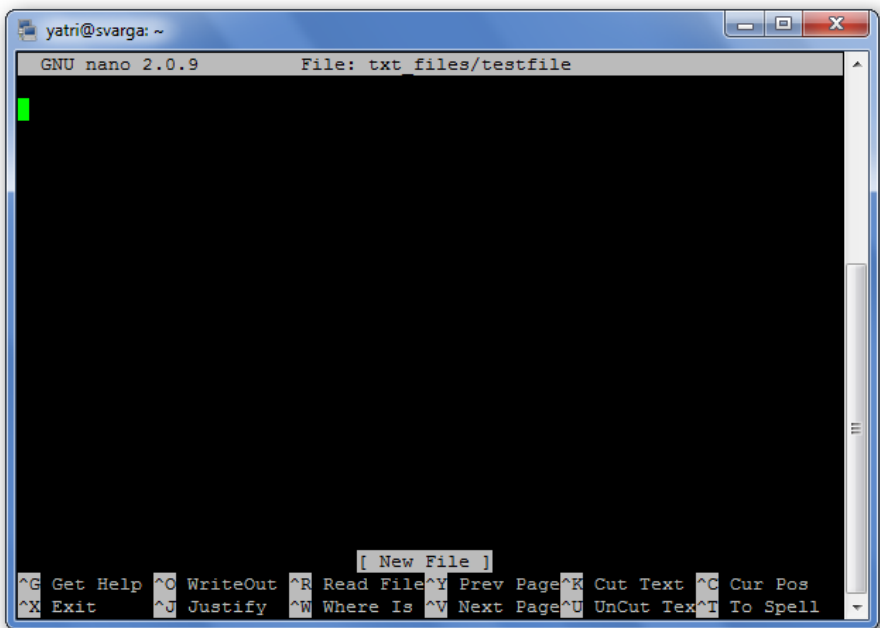
You can also use the following syntax:

```
nano /path/to/filename
```

Nano will follow the path and open that file if it exists. If it does not exist, it'll start a

new buffer with that filename in that directory.

Let's take a look at the default nano screen.



At the top, you'll see the name of the program and version number, the name of the file you're editing, and whether the file has been modified since it was last saved. If you have a new file that isn't saved yet, you'll see "New Buffer." Next, you'll see the

contents of your document, a body of text. The third-line from the bottom is a “system message” line that displays information relevant to the program executing a function. Here, you can see that it says “New File.” Lastly, the final two rows at the bottom are what make this program very user-friendly: the shortcut lines.

It’s a WYSIWYG editor; “what you see is what you get.” What you type directly goes into the text input, unless you modify it with a key like Control or Meta. It’s pretty simple, so type some text out, or copy something and paste it into your terminal so we have something to play with.

```
yatri@svarga: ~
GNU nano 2.0.9      File: txt_files/testfile      Modified

http://en.wikipedia.org/wiki/Privative_a

Privative a

In Ancient Greek grammar, privative a (also known as privative
alpha; in Latin, α privātivum) is the prefix a- that expresses
negation or absence (e.g., a-theos, a-typical). It is derived
from a Proto-Indo-European syllabic nasal *n̥-, the zero ablaut
grade of the negation *ne, i.e. /n/ used as a vowel. For this
reason, it appears as an- before vowel (e.g. an-alphabetism,
an-esthesia, an-archy).[1]

Sanskrit

The same prefix appears in Sanskrit, also as a-, an-

Latin

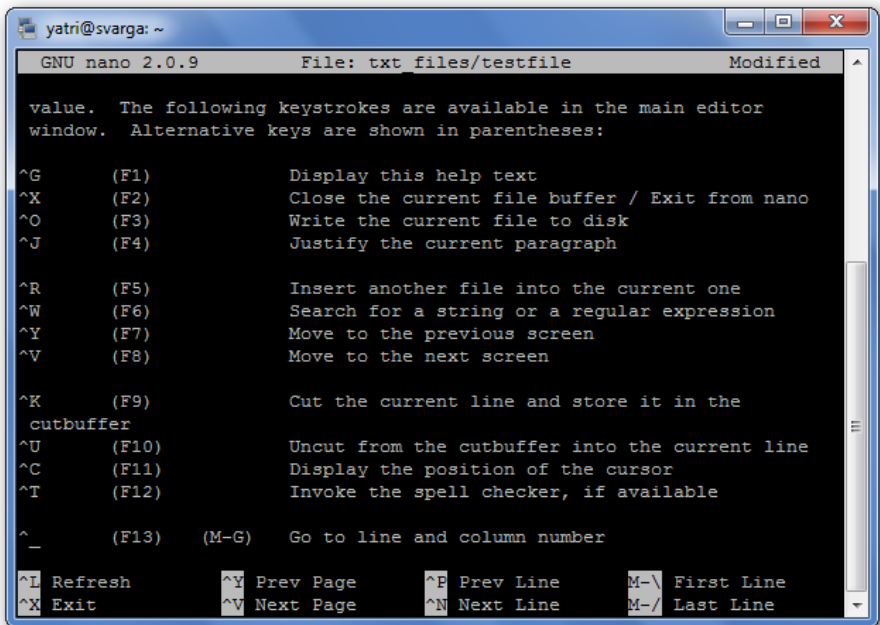
In Latin, the cognate prefix is in-. The prepositional prefix in-
is different.

^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Tex ^I To Spell
```

Shortcuts

Program functions are referred to as “shortcuts” in nano, such as saving, quitting, justifying, etc. The most common ones are listed at the bottom of the screen, but there are many more that aren’t. Note that nano does not use the Shift key in shortcuts. All shortcuts use lowercase letters and unmodified number keys, so Ctrl+G is NOT Ctrl+Shift+G.

Hit Ctrl+G to bring up the Help documentation and scroll down to see a list of valid shortcuts.

A screenshot of a terminal window showing the GNU nano 2.0.9 editor. The window title is 'yatri@svarga: ~'. The editor's status bar shows 'File: txt_files/testfile' and 'Modified'. The main text area displays the help text, which lists various keystrokes and their functions. The text is as follows:

```
value. The following keystrokes are available in the main editor
window. Alternative keys are shown in parentheses:

^G      (F1)          Display this help text
^X      (F2)          Close the current file buffer / Exit from nano
^O      (F3)          Write the current file to disk
^J      (F4)          Justify the current paragraph

^R      (F5)          Insert another file into the current one
^W      (F6)          Search for a string or a regular expression
^Y      (F7)          Move to the previous screen
^V      (F8)          Move to the next screen

^K      (F9)          Cut the current line and store it in the
cutbuffer
^U      (F10)         Uncut from the cutbuffer into the current line
^C      (F11)         Display the position of the cursor
^T      (F12)         Invoke the spell checker, if available

^_      (F13) (M-G)   Go to line and column number

^L Refresh      ^Y Prev Page      ^P Prev Line      M-^ First Line
^X Exit         ^V Next Page      ^N Next Line      M-_/ Last Line
```

When you're done looking at the list, hit Ctrl+X to exit help.

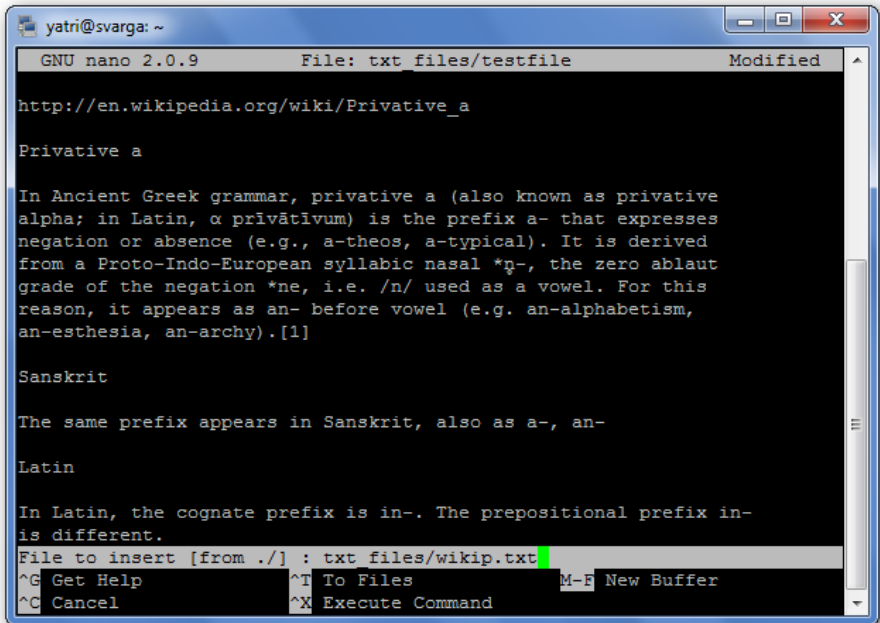
Let's say you're working on a new text file, or "buffer," and you want to save it. This is called "writing out" and is executed by hitting Ctrl+O. You'll be prompted for a filename to use, and the shortcuts at the

bottom will change to reflect what you can enter to complete this particular command.



```
yatri@svarga: ~  
GNU nano 2.0.9      File: txt_files/testfile      Modified  
  
http://en.wikipedia.org/wiki/Privative_a  
  
Privative a  
  
In Ancient Greek grammar, privative a (also known as privative  
alpha; in Latin,  $\alpha$  privativum) is the prefix a- that expresses  
negation or absence (e.g., a-theos, a-typical). It is derived  
from a Proto-Indo-European syllabic nasal *p-, the zero ablaut  
grade of the negation *ne, i.e. /n/ used as a vowel. For this  
reason, it appears as an- before vowel (e.g. an-alphabetism,  
an-esthesia, an-archy).[1]  
  
Sanskrit  
  
The same prefix appears in Sanskrit, also as a-, an-  
  
Latin  
  
In Latin, the cognate prefix is in-. The prepositional prefix in-  
is different.  
File Name to Write: txt_files/testfile  
^G Get Help      ^T To Files      M-M Mac Format   M-F Prepend  
^C Cancel        M-D DOS Format   M-A Append      M-E Backup File
```

If you want to insert the contents of another file into your current buffer, you'd type Ctrl+R.



```
yatri@svarga: ~
GNU nano 2.0.9      File: txt_files/testfile      Modified
http://en.wikipedia.org/wiki/Privative_a

Privative a

In Ancient Greek grammar, privative a (also known as privative
alpha; in Latin, α privātivum) is the prefix a- that expresses
negation or absence (e.g., a-theos, a-typical). It is derived
from a Proto-Indo-European syllabic nasal *n̥-, the zero ablaut
grade of the negation *ne, i.e. /n/ used as a vowel. For this
reason, it appears as an- before vowel (e.g. an-alphabetism,
an-esthesia, an-archy).[1]

Sanskrit

The same prefix appears in Sanskrit, also as a-, an-

Latin

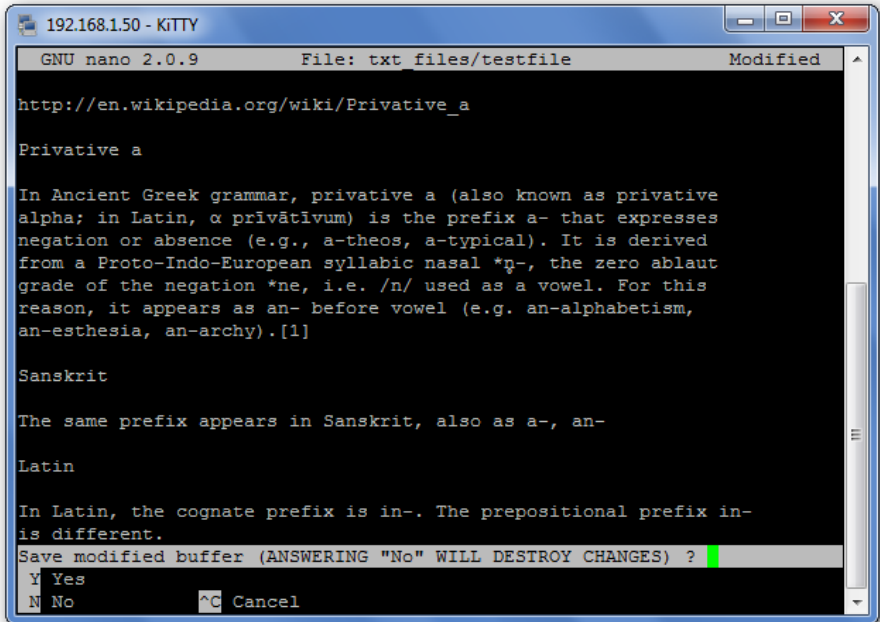
In Latin, the cognate prefix is in-. The prepositional prefix in-
is different.
File to insert [from ./] : txt_files/wikip.txt
^G Get Help      ^T To Files      M-F New Buffer
^C Cancel        ^X Execute Command
```

You can cancel both of the previous commands by typing Ctrl+C.

You can hit Escape twice instead of holding down the Control key, if you have trouble doing that. There are also some commands that require use of the Meta key. On most keyboard layouts, Meta equates to the Alt button.

When you want to quit nano, you just hit Ctrl+X. Nano will politely ask you if you

want to save your buffer, and you can cancel this action as well.



```
192.168.1.50 - KITTYY
GNU nano 2.0.9      File: txt_files/testfile      Modified
http://en.wikipedia.org/wiki/Privative_a

Privative a

In Ancient Greek grammar, privative a (also known as privative
alpha; in Latin, α privātivum) is the prefix a- that expresses
negation or absence (e.g., a-theos, a-typical). It is derived
from a Proto-Indo-European syllabic nasal *ǵ-, the zero ablaut
grade of the negation *ne, i.e. /n/ used as a vowel. For this
reason, it appears as an- before vowel (e.g. an-alphabetism,
an-esthesia, an-archy).[1]

Sanskrit

The same prefix appears in Sanskrit, also as a-, an-

Latin

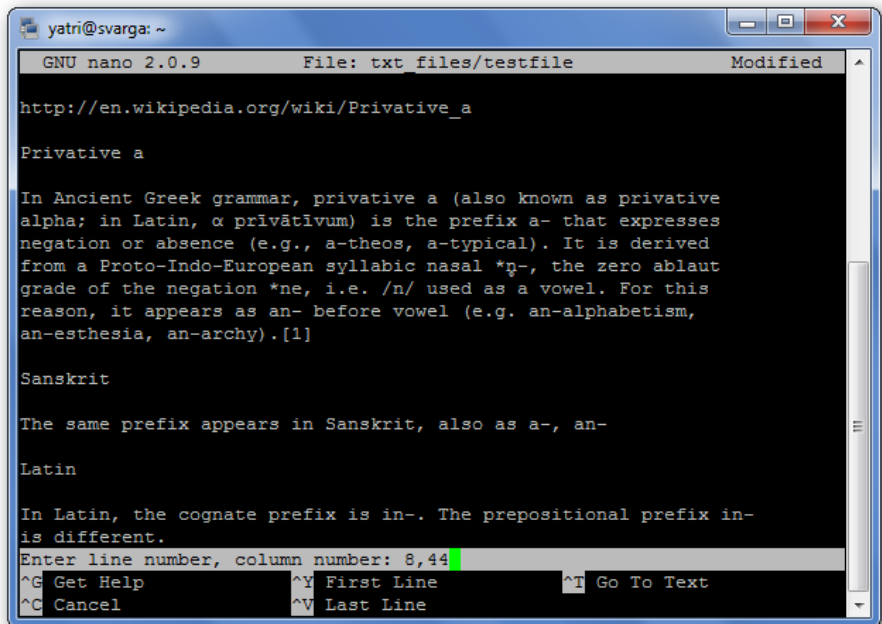
In Latin, the cognate prefix is in-. The prepositional prefix in-
is different.
Save modified buffer (ANSWERING "No" WILL DESTROY CHANGES) ?
Y Yes
N No      ^C Cancel
```

Navigation

Now that we've got a hang of shortcuts, let's get used to moving around a text file very quickly. Of course, you can always use the Home, End, Page Up, Page Down, and the arrow keys to get around, but that requires moving your fingers from the letters that we all love so much.

To move the cursor forward or backward, you can type Ctrl+F and Ctrl+B. To move up and down one line at a time, you can type Ctrl+P and Ctrl+N. In other words, you can use those keys instead of the Right, Left, Up, and Down arrows, respectively. Missing the Home and End keys? You can use Ctrl+A and Ctrl+E. Want to move pages at a time instead? Ctrl+V moves down a page, and Ctrl+Y moves up a page.

But wait, there's more! To move forward and backward one word at a time, you can use Ctrl+Space and Meta+Space (remember, that's Alt+Space). And, if you're really in a rush, you can hit Ctrl+_ and then type in the line number, a comma, and the column number to jump straight there.



```
yatri@svarga: ~
GNU nano 2.0.9      File: txt_files/testfile      Modified

http://en.wikipedia.org/wiki/Privative_a

Privative a

In Ancient Greek grammar, privative a (also known as privative
alpha; in Latin,  $\alpha$  privativum) is the prefix a- that expresses
negation or absence (e.g., a-theos, a-typical). It is derived
from a Proto-Indo-European syllabic nasal *n̥-, the zero ablaut
grade of the negation *ne, i.e. /n/ used as a vowel. For this
reason, it appears as an- before vowel (e.g. an-alphabetism,
an-esthesia, an-archy).[1]

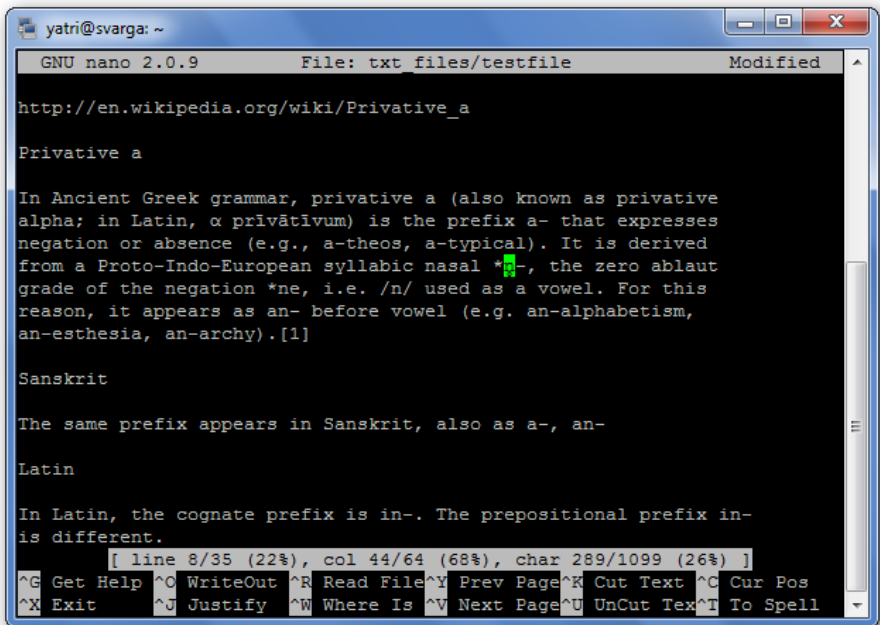
Sanskrit

The same prefix appears in Sanskrit, also as a-, an-

Latin

In Latin, the cognate prefix is in-. The prepositional prefix in-
is different.
Enter line number, column number: 8,44
^G Get Help      ^Y First Line      ^T Go To Text
^C Cancel        ^V Last Line
```

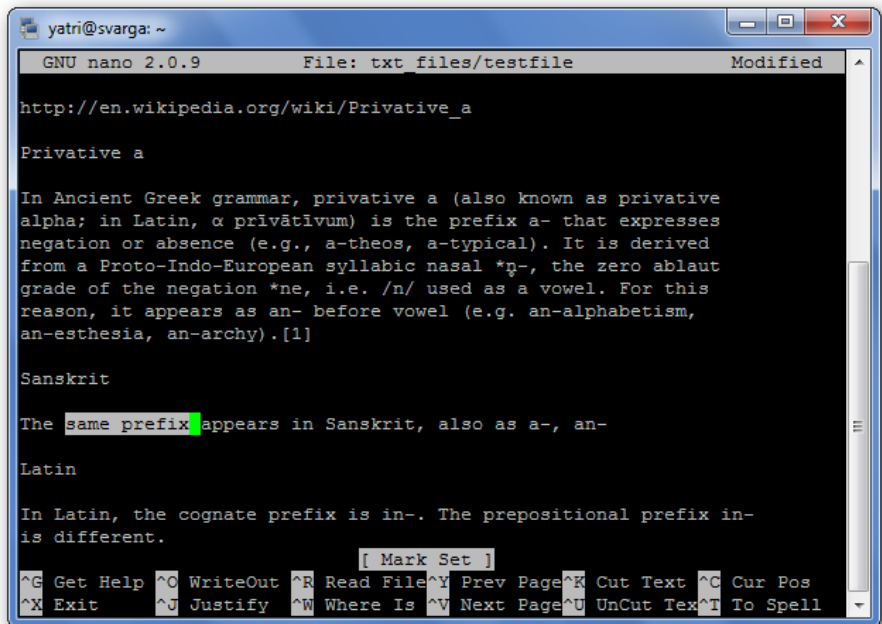
If you want to see where your cursor currently is, sort of like nano-GPS, hit Ctrl+C.



```
yatri@svarga: ~  
GNU nano 2.0.9 File: txt_files/testfile Modified  
  
http://en.wikipedia.org/wiki/Privative_a  
  
Privative a  
  
In Ancient Greek grammar, privative a (also known as privative  
alpha; in Latin, α privātivum) is the prefix a- that expresses  
negation or absence (e.g., a-theos, a-typical). It is derived  
from a Proto-Indo-European syllabic nasal *ǵ-, the zero ablaut  
grade of the negation *ne, i.e. /n/ used as a vowel. For this  
reason, it appears as an- before vowel (e.g. an-alphabetism,  
an-esthesia, an-archy).[1]  
  
Sanskrit  
  
The same prefix appears in Sanskrit, also as a-, an-  
  
Latin  
  
In Latin, the cognate prefix is in-. The prepositional prefix in-  
is different.  
[ line 8/35 (22%), col 44/64 (68%), char 289/1099 (26%) ]  
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos  
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^I To Spell
```

Copying, Cutting, and Pasting

When we want to copy text in graphical environment, we highlight it with the cursor. Similarly, in nano we “mark” it by using the Ctrl+^ command. You simply move the cursor to where you want to start marking, and then you hit Ctrl+^ to “set” it. This will mark everything between the starting point up to and NOT including the cursor.



```
yatri@svarga: ~
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http://en.wikipedia.org/wiki/Privative_a

Privative a

In Ancient Greek grammar, privative a (also known as privative
alpha; in Latin, α privātivum) is the prefix a- that expresses
negation or absence (e.g., a-theos, a-typical). It is derived
from a Proto-Indo-European syllabic nasal *n̥-, the zero ablaut
grade of the negation *ne, i.e. /n/ used as a vowel. For this
reason, it appears as an- before vowel (e.g. an-alphabetism,
an-esthesia, an-archy).[1]

Sanskrit

The same prefix appears in Sanskrit, also as a-, an-

Latin

In Latin, the cognate prefix is in-. The prepositional prefix in-
is different.

[ Mark Set ]
^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Tex ^I To Spell
```

Note that the cursor is on the empty space, and copying/cutting will not include this space. You can also mark backwards from your “set” point. Be careful, however, as you can edit text while your marking. If you messed up, just hit Ctrl+^ again to unset the marker and you can start over.

To copy the marked text, hit Meta+^. If, instead, you want to cut the text, hit Ctrl+K.

To Paste your text, move the cursor to a suitable position and hit Ctrl+U.



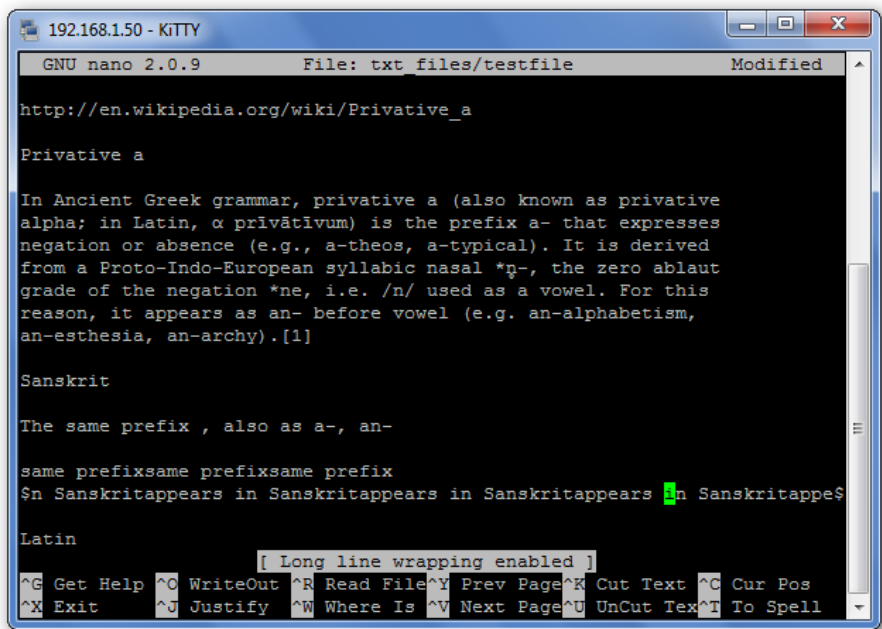
```
yatri@svarga: ~  
GNU nano 2.0.9 File: txt_files/testfile Modified  
  
http://en.wikipedia.org/wiki/Privative_a  
  
Privative a  
  
In Ancient Greek grammar, privative a (also known as privative  
alpha; in Latin, α privātivum) is the prefix a- that expresses  
negation or absence (e.g., a-theos, a-typical). It is derived  
from a Proto-Indo-European syllabic nasal *ǵ-, the zero ablaut  
grade of the negation *ne, i.e. /n/ used as a vowel. For this  
reason, it appears as an- before vowel (e.g. an-alphabetism,  
an-esthesia, an-archy).[1]  
  
Sanskrit  
  
The same prefix , also as a-, an-  
  
same prefixsame prefixsame prefix  
appears in Sanskrit  
  
Latin  
[ Mark Set ]  
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos  
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell
```

If you want to remove an entire line of text, simply hit Ctrl+K without highlighting anything. This sometimes comes in handy when editing configuration files.

Some Extra Shortcuts

You know how in notepad, you can force long lines of text to wrap-around into what

look like paragraphs? You can toggle that feature in nano with the Meta+L shortcut. Since line wrapping is set to “on” by default, this usually comes in handy in the opposite way; for example, you’re writing a config file and want to disable line-wrapping.



The screenshot shows a terminal window titled "192.168.1.50 - KTTY" with a nano 2.0.9 editor. The file being edited is "txt_files/testfile". The text in the editor is as follows:

```
http://en.wikipedia.org/wiki/Privative_a

Privative a

In Ancient Greek grammar, privative a (also known as privative
alpha; in Latin, α privātivum) is the prefix a- that expresses
negation or absence (e.g., a-theos, a-typical). It is derived
from a Proto-Indo-European syllabic nasal *ṛ-, the zero ablaut
grade of the negation *ne, i.e. /n/ used as a vowel. For this
reason, it appears as an- before vowel (e.g. an-alphabetism,
an-esthesia, an-archy).[1]

Sanskrit

The same prefix , also as a-, an-

same prefixsame prefixsame prefix
$ñ Sanskritappears in Sanskritappears in Sanskritappears in Sanskritappe$

Latin

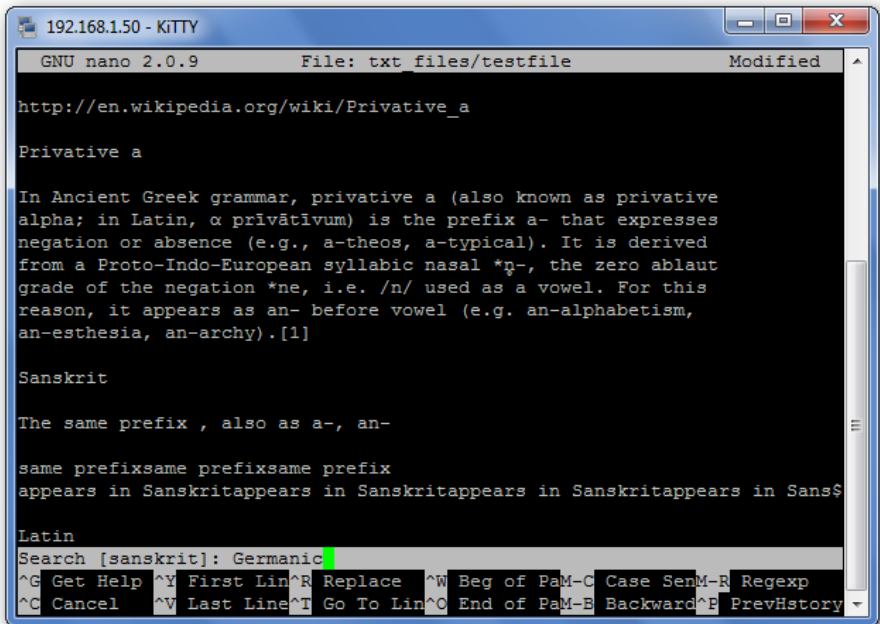
[ Long line wrapping enabled ]
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^V Next Page ^U UnCut Text ^T To Spell
```

The cursor is positioned at the end of the line containing "\$ñ Sanskritappears in Sanskritappears in Sanskritappears in Sanskritappe\$". A status bar at the bottom indicates "[Long line wrapping enabled]".

You can see that the line the cursor is on has a “\$” at both the beginning and end. This signifies that there’s more text both

before and after the portion being displayed on screen.

If you want to search for a text string, hit Ctrl+W, and enter your search term. This search can then be cancelled mid-execution by hitting Ctrl+C without destroying your buffer.



```
192.168.1.50 - KiTTY
GNU nano 2.0.9      File: txt_files/testfile      Modified
http://en.wikipedia.org/wiki/Privative_a

Privative a

In Ancient Greek grammar, privative a (also known as privative
alpha; in Latin, α privātivum) is the prefix a- that expresses
negation or absence (e.g., a-theos, a-typical). It is derived
from a Proto-Indo-European syllabic nasal *ǵ-, the zero ablaut
grade of the negation *ne, i.e. /n/ used as a vowel. For this
reason, it appears as an- before vowel (e.g. an-alphabetism,
an-esthesia, an-archy).[1]

Sanskrit

The same prefix , also as a-, an-

same prefixsame prefixsame prefix
appears in Sanskritappears in Sanskritappears in Sanskritappears in Sans$

Latin
Search [sanskrit]: Germanic
^G Get Help ^Y First Lin^R Replace ^W Beg of PaM-C Case SenM-R Regexp
^C Cancel ^V Last Line^T Go To Lin^O End of PaM-B Backward^P PrevHistory
```

The previous search term appears in the square brackets, and leaving the line blank

and hitting Enter will repeat that last search.

And after you get really comfortable, you can turn that helpful section at the bottom off by hitting Meta+X to get more screen space for editing!



```
192.168.1.50 - KTTY
GNU nano 2.0.9      File: txt_files/testfile      Modified
In Latin, the cognate prefix is in-. The prepositional prefix in-
is different.

Germanic languages

In English and other West Germanic languages, the cognate is un-,
except in Dutch, where it is on-. In North Germanic languages,
the -n- has disappeared and Old Norse has ú- (e.g., ú-dáins-akr),
Danish and Norwegian have u-, whereas Swedish uses o- (pronounced
[u]), and Icelandic uses related ó-.

Homonym

The prefix &- ha- (also &- a- from psilosis), copulative a, is
nearly homonymous with privative a, but originates from
Proto-Indo-European *sṃ.[1]

MOAR SPACE!!!!!!1!!!!1ONE!!!
```

The strength of nano lies in its simplicity of use. The shortcuts work just like in GUI-based word processors like Word and Open Office, so it's just a matter of learning

which ones do what. Everything outside of that is just simple text-editing. Next time you have to edit stuff on the command-line, we hope that you'll be more comfortable with it now that you've gotten familiar with nano.