AN INTRODUCTION TO ELLE

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I. INTRODUCTION

WELCOME to the world of ELLE!

ELLE is the name of the text editor program. It stands for "ELLE Looks Like EMACS". EMACS is a very advanced text editor developed at Massachusetts Institute of Technology, which has spread to many places using many different computer systems. ELLE is not as powerful or as friendly as the real EMACS, but we hope you will like it.

ELLE is great for writing papers, reports, tables, and messages that need to be perfect. It is capable of inserting, deleting, and moving words or text anywhere you want.
II. FIRST STEPS

Here we explain a few things to help you understand ELLE, and show you how easy it is to use.

A. MEANING OF THE WORDS "TEXT" AND "FILE"

ELLE is a "text editor". It allows you to "edit" (that is, change) stuff that we call TEXT. Text is made of CHARACTERS such as the letters A to Z, the digits 0 to 9, and punctuation marks like :;"#(). Even things like space and carriage return are characters. A book is made of text printed on paper, messages are made of text stored in the computer, and this whole paragraph is a bunch of text. Text is anything you see printed in a book, except pictures.

A computer "book" is called a FILE. The computer is like a library; it has many files, or "books", that you can read. Every book has a title, and every FILE has a FILENAME. If you forget the name of a file (or book), you will have a hard time asking the computer (or librarian) to find it for you!

Remember that a computer book is just a file of text, and ELLE is a text editor. This means that you can write your own "books" with ELLE! It does not matter how big or how small they are; they can be one word long, or they can have thousands and thousands of characters. Because you are the "author", you can name them anything you want.

From now on, we will mostly use the words "file" and "filename". But if you have trouble understanding those words, just remember that the computer is a "library", a file is a "book", a filename is the "title", and text (or characters) is "words" (or "letters").

B. THE COMMANDS

ELLE makes it very easy to write things. Normally, anything that you type to ELLE becomes part of what you are writing. But how do you tell ELLE to do something different, like correct a mistake? You have to type a COMMAND. Commands are special characters that you almost never want to appear in your writing, and we use these characters for telling ELLE to do special things.
The "commands" in ELLE are given with the CONTROL (CTRL) or ESCAPE (ESC) keys. All CONTROL key commands require that you hold down the CTRL key while you type a letter. This is just like using the SHIFT key. For example, CTRL-B means to hold down the CTRL key while you hit the "B" key on the keyboard. All ESCAPE key commands require that you hit the ESC key BEFORE you hit some other letter. For example, ESC D means to first hit the ESC key and then type "D". The command letters are shown in this manual as capital letters, but you do not have to shift and make the letter a capital; just type the letter normally, without using the SHIFT key.

C. THE "CURSOR"

The CURSOR is the little "underline" on your screen that blinks and moves around. (Some terminals may have a little "block" instead of an underline -- it is the same thing.) It is important to remember that you are always working where the cursor is located, and many of the commands relate to the position of the cursor. For example, when you are writing something, your typing will always be put on top of the cursor.

D. MAKING YOUR FIRST FILE

Now you are ready to start using ELLE! Let us make one file with ELLE and you will see some of the things that can be done.

-- Log on.
-- Type "elle first" followed by hitting the RETURN key.

"elle" is the command to start ELLE; "first" is the name of the file that we want to write. We could call it something else, but because this is our first file, "first" is a nice name.

You will see your screen go blank, and the following words appear at the bottom of your screen:

ELLE 2.6e (Fundamental) first: first

-- Now you may begin typing some text. Type "Hello... this is a test sentence," or anything you like.
As you start typing some text, you will see the bottom of the screen change to:

ELLE 2.6e (Fundamental) first: first *

When you get to the end of a line, just type hit the RETURN key and continue typing whatever text you want on the next line.

- If you make a mistake while typing, push the "DELETE" key, and the letter to the left of the cursor will disappear.
- Hitting CTRL-D will delete the character the cursor is under.
- If you wish to move backward, type CTRL-B until the cursor is where you want it.
- If you wish to go forward, type CTRL-F until the cursor is where you want it.

- (Deleting words or sentences is explained in Chapter III.)

-- After you have finished typing text and you are ready to save the file, type: CTRL-X CTRL-S. (Remember, hold down the CTRL key while you type "X". Then keep holding it down while you type "S".)

You will see at the bottom of your screen:

ELLE 2.6e (Fundamental) first: first *
Writing...Written

What you wrote on the screen has now been stored in the computer "library". You have just made your first file, and it has the filename "first". It will stay there as long as you want, even after you log out or hang up.

-- To get out of ELLE, type CTRL-X CTRL-Z. You will see at the bottom of your screen:

ELLE 2.6e (Fundamental) first: first
Quit?

-- Type "y" (for "yes") and RETURN. (If you change your mind and want to continue editing, you can type "n" for "no")
You are now out of ELLE and can use your familiar again. The next time you give the command "elle first", you will see everything in "first" that you saved from the last time. You can change and save things in "first" as many times as you like!
III. BASIC EDITING

A. GETTING INTO ELLE

To start ELLE give the command:

elle filename

"Filename" can be the name of an old file that you already have, like "first", or a name for a new file you want to create. A new filename should be a short word; do not use more than 13 letters, and do not use punctuation marks.

If it is a new file name, the screen will go blank and you will see the name of the file at the bottom of the screen. You can now start typing text.

If it is an old file name, the screen will then be filled with the text of the old file, and the name of the file will appear at the bottom of the screen. You can now start inserting and editing the text.

B. GETTING OUT OF ELLE

When you want to finish an editing session, there are two things you will usually want to do:

(1) Save your work by typing:

CTRL-X CTRL-S

This will SAVE the file on the computer. NOTE: You MUST do this if you want the computer to remember what you changed. If you do not do this, the new "book" you have written will not be put away in the "library".

(2) Exit by typing:

CTRL-X CTRL-Z

This tells ELLE that you wish to quit. The computer will ask "Quit?" to make sure you mean it. You type "y" or "yes" (followed by RETURN) if you really want to quit. If you type anything else, you will be put back into the text to continue editing.
Even if you forget to SAVE the file, you will get:

Buffer filename contains changes – write out?

ELLE wants to be sure that you did not forget. If you want to save your changes, answer "y" for "yes". Answering yes means to have the file written so that it is kept as you have changed it. If you do not want the changes, answer "n" for "no". Answering no means to keep the file as it was before you started ELLE.

C. BASIC EDITING COMMANDS

The following is a summary of the basic commands for ELLE. Many of the commands are made so that you can remember what the command does by the first letter of the word. For example, CTRL-K means to (K)ill everything to the right of the cursor on that line.

1. INSERTING

All normal characters you type will be "inserted" where the cursor is. If there is already a character where the cursor is, that character (and everything else on the line) will be moved over to make room for the new character.

When your words get near the right edge of the screen, you should hit the RETURN key and start a new line. If the line becomes longer than the video display allows, a "!" mark shows there is more on one line than will print on an 8 1/2 inch sheet of paper. The extra text that you would normally not see on the 8 1/2 inch sheet will be continued on the next line; that is, ELLE will show you what has "gone off the edge", but you must remember that the words will go off the paper if you try to print them on an 8 1/2 inch sheet of paper. You may go to some word before the "!" mark and hit the RETURN key to get rid of the "!" mark. (If you have a very long line with "!" marks on several consecutive lines, you may have to do this procedure several times.)

See Chapter V on "filling text" for a way to remove the "!" mark.
2. MOVING THE CURSOR

CTRL-F FORWARD one character
CTRL-B BACKWARD one character
ESC F FORWARD one word
ESC B BACKWARD one word
CTRL-E END of current line
CTRL-A Beginning of current line (Well, "A" begins the alphabet)
CTRL-N NEXT line (goes forward to next line)
CTRL-P PREVIOUS line (goes backward to previous line)
CTRL-V go forward to beginning of next screenful
ESC V go backward to beginning of previous screenful
ESC < go to beginning of whole file
ESC > go to end of whole file
ESC [ forward a paragraph
ESC ] backward a paragraph

Moving the cursor will never delete or insert any characters.

3. DELETING

CTRL-D DELETES the one character the cursor is under
DELETE DELETES the one character to the left of cursor
ESC D Kills forward one word from the cursor
ESC DELETE Kills backward one word from the cursor
CTRL-K KILLS rest of the line (to the right of the cursor)
If there is nothing there, the following lines move up.

4. CHANGING YOUR MIND

If you make a mistake and delete something by accident, you may get back the most recent deletion(s) by using:

CTRL-Y

This means YANK back (bring back) what was most recently deleted. It will be inserted at the cursor. Note: Single character deletes (CTRL-D and DELETE) are not saved. Only deletes of words or lines are saved.
5. **IF THE SCREEN GETS MESS ED UP**

If you get noise on the phone line or if someone links to you while you are in ELLE, you will need to clear the screen of the new, unwanted characters. To make the screen show what you are really editing, type:

```
CTRL-L
```

ELLE will clear the screen and recreate the picture.
IV. ADVANCED EDITING

In this section we will be talking about some of the more sophisticated uses of ELLE.

A. CASE CHANGING

Here are some handy little commands to make words uppercase and lowercase, if they are not the way you want them.

ESC L  Lowercase word. The first word to the right is changed to lower case. If the cursor is in the middle of a word, only the part to the right will be changed.

ESC U  Uppercase word. Just like ESC L, except it changes letters of the word to upper case.

ESC C  Capitalize word. Just like ESC L, except the first letter that is changed will become upper case. The others will become lower case.

B. COMMANDS DONE A SPECIFIC NUMBER OF TIMES

You may give a specific number of times you wish a specific command to be done. For instance, you may go forward six words or backwards nine lines. To define how many times you wish the next command to be done give the command:

ESC number

In place of the word "number" you type a number that you wish. You then give the command that you want.
Examples:

To move ahead three lines --
   ESC 3 CTRL-N

To delete the next ten characters --
   ESC 10 CTRL-D

To move ahead two screens --
   ESC 2 CTRL-V

C. FOUR WORDS, LINES, CHARACTERS ETC.

There is a special command that will let you do the commands we have learned so far, but in multiples of four. This is:

   CTRL-U

You type this before the command that you want to do four times. For example:

Delete the next four letters --
   CTRL-U CTRL-D

Move forward four lines --
   CTRL-U CTRL-N

Move four words ahead --
   CTRL-U ESC F

If you do CTRL-U CTRL-U, then a command, the command will happen 16 TIMES!! So be careful of the number of CTRL-U's that you do.

Once you get used to using ELLE, this is faster for moving around generally than trying to set a specific number of times for a command.

D. TRANSPOSING CHARACTERS AND WORDS
Transpose means to switch or exchange. If you transpose the letters "pn" you get the letters "np". Many times we type fast and misspell a word by transposing letters. You can switch the letters by using:

CTRL-T

To do this, just put the cursor under the second letter that is placed wrong, and hit CTRL-T.

To transpose words use put the cursor on the second word of the two words that you want transposed and use:

ESC T

E. FILLING TEXT

[ When you look at this section you see that the words do not fill in on the screen. If you edit a lot, you may get paragraphs that look a little bit "rough".]

To fill in the paragraph use the command:

ESC Q

You may put the cursor anywhere in the paragraph and the whole paragraph will be adjusted. This is how the paragraph looks after the ESC Q is done:

[ When you look at this section you see that the words do not fill in on the screen. If you edit a lot, you may get paragraphs that look a little bit "rough".]

The paragraph is filled in to look like a normal paragraph. It is important to remember that a paragraph starts from an indented line and ends just before a new line that also has indentation.
In these two paragraphs, two of the sentences are indented. The indentation shows that a new paragraph begins.

If the cursor was put anywhere in one of the four lines above, only the two sentences before this one would be filled. That is because the sentence beginning with "If the cursor..." is indented, and is the beginning of a new paragraph.

This command is very good when you see the "!" mark showing that there are too many characters to print on an 8 1/2 inch piece of paper. Just put the cursor at the beginning of the sentence where the "!" mark appears, and the line (and the whole paragraph it is in) will be filled so that the "!" will disappear.

Example:

```
| The text in this scr!|
|een will overflow. Th!|
e "!" mark shows that !|
|the lines need to be f!|
|illed. |
```

The above screen shows that the lines must be fixed so that you can fit the whole text on an 8 1/2 inch page. Putting the cursor somewhere near the beginning of the sentence and hitting ESC Q will remove all the "!" marks and put in carriage returns where necessary. Below is how the text might look if the cursor was put under the word "The" and then hitting ESC Q.

```
| The text in this |
screen will overflow. |
The "!" mark shows |
|that the lines need |
to be filled. |
```

F. SETTING LINE LENGTH
If you use the ESC Q command to fill without using this command, the text will be justified to 71 characters.

To set a special line length you should type:

ESC number

where "number" is where you type the number of characters that you want to have on one line. Immediately type:

CTRL-X F

You will see at the bottom of your screen:

Fill column =

followed by the number that you gave as the line length with the "ESC number" command.

This same procedure may be done a bit differently. You may put the cursor in any column that you wish on the screen, and giving the "CTRL-X F" command will set the line length to that width that the cursor is at. This does not fill the paragraph; it only sets the line length for when you give the command ESC Q. To adjust your paragraphs to the length you set, you must use the ESC Q.

G. SEARCHING

Sometimes you know what you are looking for in a file, but it takes a long time to move there with CTRL-N or CTRL-V. There is a much faster way to do this, which is good for other things too. When you type the SEARCH command CTRL-S, you will see at the bottom of the screen:

Search:

ELLE is asking you for a STRING to search for. A string is just a small piece of text. The letters "refab" are a string, for example. Just type in some letters, and end the string with a RETURN. ELLE will then look through the text to find the string and go to the first occurrence of that string. If you were looking for the word "Deafnet", you would hit CTRL-S and then type in those letters. ELLE would go to the first place where the word Deafnet appeared.

It helps to not search for a string that is too short. For example, you can ask ELLE to search for the string "he". ELLE will start from where the cursor is and stop as soon as it finds anything with those letters in it; the words "here", "there", "she", and "father" all have the string "he" in them, and the cursor will stop at any one of
those places if the word "he" is searched for. If ELLE cannot find any-
thing that matches what you typed, you will see at the bottom:

    Search failed

You have to be sure that you type the string in the right case. This
means that you must be sure that you have your capital letters typed
exactly as in the word you are searching for. "He" will not match the
"he" in "There", but it will match the "He" in "Here".

If you want to search again for other occurrences of the same
string, just type CTRL-S again and then a RETURN. ELLE will understand
that you want to look for the same string as last time. If you want to
search backwards instead, use the command CTRL-R for "Reverse search".
It works exactly like CTRL-S except for the direction that it searches
in.

H. USE THE "MARK" TO MAKE A "REGION"

The MARK is like an "invisible cursor" that stays where you set it.
Sometimes you will want to delete or move a lot of text at once. You
can do this by setting the mark at one end of the stuff you want to
delete and by moving the cursor to the other end; everything between the
mark and the cursor is called a REGION.

To set the mark, type CTRL-@ when the cursor is where you want the
mark to be. You cannot see the mark, but ELLE will remember where it
is. It does not hurt to type CTRL-@ several times, but there is only
one mark, and ELLE only remembers where you last set it.

If you want to make sure you know where the mark is, type CTRL-X
CTRL-X. This will exchange the cursor and the mark; the cursor will
move to where the mark was set, and the mark will be reset to the place
the cursor was at. Just type CTRL-X CTRL-X again to get back to the
place you were at. This is handy when you want to move somewhere else
briefly, but come back to the same place. Just set the mark, wander
around, and then type CTRL-X CTRL-X to get back to your starting place.

To delete the region between the mark and the cursor, type CTRL-W
(for Wipe-out). All the text in the region will disappear. Of course,
typing CTRL-Y (for Yank-back) will bring back all the deleted text.

This makes it very easy to move whole paragraphs of text. Just
mark the beginning of the paragraph and then move the cursor to the end
of the paragraph and wipe out that section (CTRL-Y). Then move the cur-
sor to the place that you wish to have the paragraph put; hit the CTRL-Y
and all the text comes back. To make a copy of a region, which you can put somewhere else with CTRL-Y, use ESC W.

I. THE "KILL RING"

By now you know that CTRL-Y will "yank back" the text you most recently deleted (or copied with ESC W). But sometimes this is not what you want; you would like to get back things that were deleted before the most recent stuff. ESC Y lets you do this! ELLE keeps a KILL RING of deleted and copied text; any time you kill something, it is saved on the "ring". It is called a ring because there is only room for 8 saved things, and if you try to save a 9th thing, the first thing will have to be kicked out. So you can only save the 8 most recent things that you deleted or copied.

To use ESC Y, you must first use CTRL-Y. If the text that is yanked back is not the stuff that you want, you can then type ESC Y. ELLE will then try to use the next most recent stuff from the kill ring. You can keep typing ESC Y as many times as you want, but after 8 times you will notice that the same things are being yanked back, and you have seen everything that was saved on the ring. (Neither CTRL-Y nor ESC Y removes anything from the ring.) Remember that you cannot use ESC Y except right after CTRL-Y or another ESC Y.

J. THE MEANING OF THE WORD "BUFFER"

A BUFFER in ELLE is like a temporary "book". When you are working on a file (a computer "book"), ELLE does not "check out" the book from the computer library; ELLE makes a copy, and this temporary copy is called a BUFFER. This lets you work on your own copy, without bothering other people who might want to read the same file. Nothing that you do with the temporary copy will have any effect, unless you ask ELLE to "save" or "write out" the buffer. The files or "books" always stay in the computer "library"; you cannot work on them there, but ELLE is like a "desk" where you can do anything you want with your copies of those books. A buffer does not have to have something in it; if you were writing a new "book", you would start with an empty buffer.

It is very important to understand this idea. If you do not know what a "buffer" is, you will be confused when you try to use the best features of ELLE.

ELLE will let you have many different buffers, all at the same time. To tell them apart, each buffer must have a BUFFER NAME. This can be anything you want, but two buffers cannot have the same name. If
a buffer is holding a "temporary copy" of a file, the buffer will also have a SOURCE FILENAME. This tells you where the copy came from, and where your changes will go if you save them back in the computer "library".

This sounds complicated, but ELLE tries to show you what is going on. Remember the line at the bottom of the screen? Let's look at it again:

Example:

```
ELLE 2.6e (Fundamental) draft: mail/draft
        ~     ~
        |     |
        buffer source
        name   filename
```

The screen will always show a buffer, and ELLE will always tell you what buffer it is. (It is impossible to have no buffer at all). If the contents of the buffer came from a file "book" in the "library", ELLE will also show you the source filename, so that you know where the text came from. This also tells you where the text will be saved when you type CTRL-X CTRL-S to put your new "book" into the "library".

If you start ELLE without giving a filename, you will see at the bottom of the screen:

```
ELLE 2.6e (Fundamental) Main:
```

It is impossible to not have any buffers, because ELLE will make one for you if necessary, and will name it "Main"

As soon as you start typing something you will see this at the bottom of your screen.

```
ELLE 2.6e (Fundamental) Main: *
```

The character "*" shows that you have modified or changed the contents of the buffer.

After you have typed a lot of text, you will see on the right of the * something like:
ELLE 2.6e (Fundamental) Main: * --50%--

This number means that the top line on the screen is 50% (or half-way) through the full file. In other words, you are in the middle of the file. If you are at the beginning of the file you will see --TOP--. If you are at the bottom of the file you will see: --BOT--.

K. CREATING BUFFERS

There are two ways to create a buffer. One is the "buffer select" command, and the other is the "find file" command. When you type the "buffer select" command,

CTRL-X B

at the bottom of your screen, you will see:

Select buffer:

Here you give the buffer a name. It can be whatever you wish, but should be less than 13 characters long, without any spaces. Hit the RETURN key when you are finished with the buffer name. You may use names that are easy like "a", "b", "1", "2", etc. Or you may use names that help you remember what you are doing like "letter.sam".

If there is not already a buffer with this name, ELLE will create an empty buffer with the name you have given it. You will also see at the bottom of the screen the name of the buffer:

ELLE 2.6e (Fundamental) buffername:

Notice that there is no source filename here (after the buffer name). The buffer will be empty.

Remember: A buffer is a TEMPORARY "book" in the editor. You can start it from nothing; you do not have to start it with a "copy" of a file from the "library".

The other way to create a buffer is the "find file" command, and this is how you start it with a "copy". This command is:

CTRL-X CTRL-F

At the bottom of the screen you will see:
Find file:

Then you type a filename and RETURN. Remember how you use the command "elle filename" to start ELLE? "Find file" does exactly the same things. First ELLE makes a buffer for you which uses the last part of the filename for the buffer name. Then, if the filename is already in the computer "library", ELLE will make a temporary copy for you and put it in the buffer. The source filename will be exactly what you typed, and will remind you of where the copy came from. Even if the filename is not in the "library", ELLE will set the source filename anyway, guessing that you will want to make a new file with that name.

L. MOVING FROM ONE BUFFER TO ANOTHER

ELLE lets you have several buffers at the same time, but usually you are only working on one of them at a time. (See Sections O. and P. about "Windows" to learn how to see two buffers at once.) In order to move from one buffer to another, you must use the "select buffer" command. That's right, CTRL-X B is used both to make new buffers and to move to buffers you already have. When you type a buffer name in response to the "Select buffer:" question, ELLE looks to see if there is already a buffer with that name. If there is one, you are moved there, and the cursor is put at the same place that you originally left it. If there is no buffer with that name, ELLE will make a new one. If you happen to forget the name of a buffer, that is ok, because ELLE will remember the names of the buffers you have made.

To get a list of the buffers you have already used type:

CTRL-X CTRL-B

NOTE: That is CTRL-X and CTRL-B; NOT the command to find a buffer.

M. GETTING A FILE INTO A BUFFER

1. READ FILE

Remember that when ELLE "gets a file", it is really making a temporary copy and putting that copy into a buffer. There are three different ways to do this. One of them is "find file", which you have already seen. Usually this is the easiest thing to do because it does a lot of the work for you. The most similar command is "read file", which is:
CTRL-X CTRL-R

At the bottom of your screen you will see:

Read file:

Here you give the name of the file that you wish to edit. Example: Suppose that you have a buffer named "contract". You wish to work on a file named "check". You may "read in" the file with the CTRL-X CTRL-R. After reading in the file called "check" you will see:

ELLE 2.6e (Fundamental) contract: check

What you have done is put the file named "check" into the buffer named "contract". If you give a file name that does not exist, you will get the error message:

Cannot open input file!

The "read file" command is useful if you know that you want to read an old file, or if you already have a buffer and want to use that same buffer to edit the file with. The command will not change the buffer name, but it will set the source filename, so that saving the buffer with CTRL-X CTRL-S will write the copy back to the place it came from.

WARNING: when you do a "read file" command, any new information that you have put in the current buffer will be lost.

2. INSERT FILE

The last way of getting text from a file into a buffer is to use the "insert file" command:

CTRL-X CTRL-I

which means to INSERT a file. At the bottom of your screen you will see:

Insert file:

Here you give the filename for the text you want to insert, and end with a RETURN. A copy of the text from the file you specify will be put where the cursor is, sort of like a big "yank". This command does not throw away the previous contents of the buffer (like "read file"), and it does not change the buffer name or the source filename.
N. SAVING OR WRITING OUT A BUFFER

When you are done working on a buffer, or just want to stop for awhile, you should "put back" your temporary "book" into the computer "library". If you do not do this before you get out of ELLE, your changes will not be saved. There are three ways to do this. The easiest one, which you have been using up to now, is "save file", or CTRL-X CTRL-S. This is fine if your buffer has a source filename, and you want to store your text using that filename.

But if your buffer does NOT have a source filename, you cannot use "save file", because it will not know what name you want to use. Or maybe the buffer does have a source filename, but you do not want to save your "book" with that name. For both of these cases you can use "write file":

CTRL-X CTRL-W

You will see at the bottom of your screen:

Write File:

You can now type in the name that you wish to give to the new file and end it with a RETURN. Names should not be longer than 13 letters, and should not have punctuation marks or spaces. This will create the file with the name that you have given. You will see this at the bottom of the screen:

Writing...Written

When you use "write file" you will also set the buffer's source filename, even if it was already set. Example: Let us assume that you have a buffer named "!". After writing the file called "todo" you will see...

ELLE 2.6e (Fundamental) 1: todo

After you have saved your buffer with "save file" or "write file" you can exit ELLE if you want, but you do not have to. You can stay in ELLE and keep editing as long as you want. You can make more changes to the same buffer, or select a new buffer to work on, or read in text from a different file, or anything you like.

The last way to write out a file is with the "write region" command. This is CTRL-X CTRL-E and acts just like the "write file" command, but it does not change the source filename of the buffer, because you probably wrote out only a small part of the buffer.
O. TWO WINDOW DISPLAY

Two window display can be helpful in several ways. If you have a large file and you wish to compare information in two different sections of that file, splitting the display into 2 windows will allow easy comparison. When you first make two windows, the screen will be split in half horizontally, and the same file will be shown in both halves. The command for making two windows is:

CTRL-X 2

You may move between the two windows by using the command to go to the OTHER window:

CTRL-X 0

Your cursor will go to the window at the place where you last left off. REMEMBER: When you make the second window, you have the SAME buffer (and file) in BOTH windows.

If you are working on one screen, you will not see the changes happen until you do the CTRL-X 0 command; then the changes will happen in that window also.

If you would like your current window to be a little bigger:

CTRL-X G

will "grow" the window you are in.

If you want to use just one window again so that the whole screen can be used to show the buffer:

CTRL-X 1

This makes one window. Use this when you have two windows and you want only one of them. Put the cursor in the window that you want to expand, then do the command. The other window will disappear. If you had a separate buffer in the window that disappeared, it is still accessible with the CTRL-X 8 command.

P. WORKING WITH TWO WINDOWS -- TWO FILES

Another reason for working with two windows is to allow you to move information in one file into another file very easily. You may create a buffer in one window and keep the original buffer in the other window. Once you have two separate buffers, you can read a different file into
each one.

IMPORTANT: With two windows, you MUST create a new buffer before reading another file into the second window. Therefore, if you are going to work with two separate files in two windows, you should do one of the following commands (to make sure the buffer is set up):

CTRL-X CTRL-F

This creates a buffer and FINDS the file for it.

CTRL-X B

This creates a blank buffer.

To copy some text from one window to the other:

1) Delete the words, sentences or area that you wish to transfer. You can also use the ESC W command to copy a region.
2) Do CTRL-Y to put all that information just deleted back where you found it. (You don't need this if you used ESC W.)
3) Do CTRL-X O to move to the other window.
4) Move the cursor to where you want the "copied" information put.
5) Do another CTRL-Y to get back the information that you want.

Q. QUERY REPLACE

ESC %

Give the ESC % command and you will see at the bottom of the screen "Replace string:". Here you give a string that you wish to have replaced followed by a carriage return. Next you will see the words "with string:" and you type the new string you wish to have inserted. ELLE will then forward search and go to the first occurrence of the string that you wish to replace. You will also see (Query Replace) at the bottom of the screen instead of (Fundamental). If you do not remember the choices, you may type "?" and you will be prompted with what can be done.
- Hitting the SPACE BAR at each point in the file will cause that occurrence of the string to be replaced with whatever you typed after the "with string:" prompt. ELLE will then go to the next occurrence of the string you wished replaced.

- Hitting the DELETE key will tell ELLE to not do the replacement on this string (and will go to the next occurrence).

- Hitting the ESCAPE key will indicate that you wish to stop the process of query replace.

- If you are sure that you wish all occurrences of the string to be replaced, you may hit the "!" key and ALL occurrences of that string will be replaced by whatever you stated. You should be careful that you are not replacing a string that might occur in some other word. Example: Replacing all occurrences of "and" with "but" will make the word "band" become "bbut" and the word "bland", "blbut". Worse would be replacing all "nation"s with "country". That would make "SRI International" become "SRI InterCountyal". Be careful.

- You may go back one previous occurrence of the string by hitting the "^" key. You may then decide to replace the string if you wish. ELLE will put the string that you wished to be "query replaced" into the search buffer so you may later search or reverse search for the same string if you wish.

R. SUMMARY OF FILE COMMANDS

CTRL-X CTRL-F
Find a file. If the filename is already associated with a buffer, this acts like a "buffer select" to that buffer. Otherwise, a new buffer is created and associated with this filename. If the file exists, a copy is made, otherwise the buffer is left empty. The source filename is set to the filename you typed.

CTRL-X CTRL-S
Save the file. This step is important to keep information for a later time. If there is a source filename, the text in the buffer (including all your changes) will be stored under that filename. If there is no source filename, ELLE will complain with this error message: No default file name. This means you must write to a file (CTRL-X CTRL-W) first and give a file name.

CTRL-X CTRL-I
Insert a file. This will copy file that you name into the buffer you are working on. This does nothing to the name of the buffer you are working in or the source filename for the buffer.
CTRL-X CTRL-R
Read a file. This will copy a file into the buffer you are working in. The buffer name will stay the same but the source filename will change. Note: if you do not save the changes you made in the buffer before you "Read in" the new text, then those changes are lost.

CTRL-X CTRL-W
Write a file. You will be asked to give a name for the file. When you give the filename, the file will be created for you. The buffer name will not change, but the source filename will be set to the filename you typed.

CTRL-X CTRL-E
Just like CTRL-X CTRL-W, except that it writes out the current region instead of the whole file.

S. MISCELLANEOUS OTHER COMMANDS

CTRL-O
This "opens up" lines. It is just like RETURN, except that the cursor does not move. If you are typing many lines, it is often more efficient to first open up some blank lines with CTRL-O before you start typing, since ELLE will not have to move things around so much while you type.

CTRL-X CTRL-O
Deletes blank lines that surround the cursor. This is handy for use with CTRL-O; you first "open up" a lot of lines, type in some text, and then give CTRL-X CTRL-O to get rid of all the blank lines that you don't need.

ESC-\n
Deletes spaces that surround the cursor.

CTRL-T
Transposes the previous character with the one the cursor is on.

ESC T
Transposes the previous word with the one the cursor is at.

CTRL-U
This will make the next command happen four times. This will work for many, but not all, commands. For example: CTRL-U ESC D will delete the next four words.

CTRL-U CTRL-L
The EXCEPTION to the "next command happen four times" rule. This will refresh only the line the cursor is on. This is especially helpful on 300 baud terminals when you wish to clean up only one
line and not refresh the whole screen because it would take too long.

ESC number CTRL-L
This adjusts the text on the screen by moving the cursor "number" of lines away from the top of the screen. The cursor will not change its position within the text. Thus, the command "ESC 0 CTRL-L" will put the cursor at the top left of the screen. Anything before the cursor will not be seen, so if you wish to use this command to position full text on the screen at a certain place, it would be good to put the cursor at the beginning of the line.

CTRL-Q
"Quotes" the next character literally, even if it is normally an ELLE command. The character immediately after this command will always be inserted into the text of your file. This is useful for things like ^L which is a "page break" when sent to a printer. If this feature was not here, then ELLE would refresh the screen every time that you wanted to insert a "page break".

ESC Q
Fill the text in this paragraph. It is important to know that a paragraph is defined as the text between two indented (or blank) lines.

CTRL-X F
Set the line length for filling a paragraph; you may give the length by typing ESC followed by the number you wish the length to be. ESC Q will use this line length when filling. Example: "ESC 55 CTRL-X F" would set the line length for filling a paragraph at 55 characters. You may also put the cursor in the column you wish to set the length, and this command will set the line length to that width.

CTRL-X ! If you wish to do some command (e.g. look at who is on the system or to get a list of your file names) you can temporarily leave ELLE and come back to where you are editing later on. To get back to your original editing session at the same place you left it, EOF character (often CTRL-D).
V. COMMAND LIST

This is a complete summary of all ELLE commands. They are grouped according to function. For detailed explanations of each command, see the other sections of the manual.

A. CURSOR MOVEMENT

CTRL-F
Forward one character.

CTRL-B
Backward one character.

ESC F
Forward one word.

ESC B
Backward one word.

CTRL-A
Beginning of current line.

CTRL-E
End of current line.

CTRL-N
Next line (goes to the next line).

CTRL-P
Previous line (goes to the previous line).

ESC ]
Forward paragraph.

ESC [
Backward paragraph.

CTRL-V
Beginning of next screenful.

ESC V
Beginning of previous screenful.

ESC <
Beginning of whole buffer.

ESC >
End of whole buffer.

B. DELETING

CTRL-D
DELETES the one character the cursor is under.

DELETE
DELETES the one character to the left of cursor.

ESC D
Kills forward one word from the cursor.

ESC DELETE
Kills backward one word from the cursor.

CTRL-K
Kills the rest of the line (to the right of the cursor).

ESC \\
Deletes spaces around the cursor.

CTRL-X CTRL-O
Deletes blank lines around the cursor.

C. CASE CHANGE

ESC C
Capitalizes word: first letter becomes uppercase and the rest becomes lowercase.
ESC L  Makes the whole next word lowercase.
ESC U  Makes the whole next word uppercase.
CTRL-X CTRL-L  Makes whole region lowercase.
CTRL-X CTRL-U  Makes whole region uppercase.

D. SEARCHING
CTRL-S  Search forward for string (ELLE will ask for string).
CTRL-R  Reverse search for string (ELLE will ask for string).
ESC %  Query replace.
(if you don't give a string, ELLE will search for last string you gave in the previous search)

E. MARKING AREAS
CTRL-@  Set (invisible) mark where cursor is.
ESC H  Mark paragraph.
CTRL-SPACE  Same character as CTRL-@, on most terminals.
CTRL-X CTRL-X  Exchange cursor and mark.
CTRL-W  Wipe-out -- kills a "region":
A region is the text between the cursor and the last place "marked". You can specify a phrase, several lines of text, or a whole section of text as a region.
ESC W  Copy region. Like CTRL-W then CTRL-Y but does not modify the buffer.
CTRL-Y  Yanks-back (un-kills) whatever you have most recently killed.
ESC Y  Yanks-back (un-kills) the next most recently killed text.
Only works after CTRL-Y or ESC Y.

F. WINDOWS
CTRL-X 2  Make two windows (split screen).
CTRL-X 1  Make one window (delete window) (make one screen).
CTRL-X 0  Go to other window.
CTRL-X ^  Grow window: makes current window bigger.

G. BUFFERS
CTRL-X CTRL-F  Find a file and make a buffer for it.
CTRL-X B  Select Buffer: goes to specified buffer or makes new one if it doesn't exist.
CTRL-X CTRL-B  Show the names of the buffers used in this editing session.
CTRL-X K  Kill buffer.
H. FILES

CTRL-X CTRL-I Insert a file where cursor is.
CTRL-X CTRL-R Read a new file.
CTRL-X CTRL-W Write buffer out to new file name.
CTRL-X CTRL-S Save file: write out buffer to its file name.
CTRL-X CTRL-E Write region out to new file name.

I. MISCELLANEOUS

CTRL-X CTRL-Z Exit from ELLE.
CTRL-L Refreshes current screen.
TAB Inserts tab: cursor moves to next tab stop (every 8 columns).
RETURN Inserts carriage return: moves cursor to new line.
CTRL-O Inserts carriage return: leaves cursor on same line.
LINEFEED Same as typing RETURN and TAB.
CTRL-T Transposes characters.
ESC T Transposes words.
CTRL-U Makes the next command happen four times.
(Example: CTRL-U ESC F will move forward four words)
CTRL-U CTRL-L Refresh only the line cursor is on.
ESC number Makes the next command happen "number" of times given. Put
any digit in place of "number".
ESC numbr CTRL-L Move cursor "number" of lines away from the top of the screen.
CTRL-Q Quote: insert the next character no matter what it is.
CTRL-G Quit: use to avoid answering a question.
CTRL-H Same as CTRL-B: move backward one character.
ESC Q Fill the paragraph to the set line length.
CTRL-X F Set line length for filling to current cursor position.
ESC nmer } Sets line length for filling to number given.
CTRL-X F } Allows you to temporarily leave ELLE and come back later to
CTRL-X ! the same location.
ESC % Query Replace.
ESC CTRL-W Append next kill.
ESC ; Inserts comment (for writing C programs).
ESC I Inserts indentation equal to previous line.
ESC ; Inserts comment (for writing C programs).
ESC ~ Say buffer is not modified.

J. UNUSED CONTROLS

CTRL- Ask for help. Not implemented.
CTRL-\ Special debugging command. Don't use.
CTRL- Special debugging command. Don't use.
CTRL-C Not used.
CTRL-Z Not used.
CTRL-] Not used.
VI. GLOSSARY

ASCII
The American Standard Code for Information Interchange.
This is the "8-level code" and is like an alphabet. There are 128 possible characters in the ASCII alphabet, and the standard says what each character looks like. For example, character #65 is "A", character #13 is RETURN, etc.
Most computers today are using ASCII so that they can agree on what each character means.

BUFFER
A temporary "book" made by ELLE which you can work on.
It becomes a permanent file in the computer "library" only when you ask for it to be "saved" or "written out". ELLE lets you have many buffers (each with its own name), and any time you want you can select a different buffer to work on.

BUFFER NAME
Just like a real file or "book", each buffer must have a buffer name. If you created the buffer yourself you can use any name you like. When ELLE makes the buffer for you (like when you use CTRL-X CTRL-F for "Find File"), it will normally give the buffer the same name as the file. Two buffers cannot have the same name.

CHARACTER
A letter, digit, punctuation mark, or formatting control such as space or tab. Everything you see on the screen is a character. Anything you send to the computer is a character.

CONTROL CHARACTERS
These are characters that you make by holding down the CONTROL key while you type a letter. We talk about them as CONTROL-X or CTRL-X. On the screen they look like ^X.

CURSOR
The blinking "underline" or "block" on the screen. It shows where characters will be inserted or deleted. "Moving" in ELLE means moving the cursor to the place where you want to do something.

EMACS
The very powerful text editor developed at Massachusetts Institute of Technology that is used for the basis of ELLE.
FILE
Like a computer "book". A file contains text; it can be empty
(no text at all) or it can hold hundreds of thousands of characters.

FILENAME
The name of a file. Exactly like the "title" of a book.
You can use any names you want as long as you follow
 certain rules. The name should not be longer than 13 letters,
 and should not have any punctuation marks or spaces in it.

JUSTIFICATION
Filling in the lines to a specific length.

MARK
An "invisible cursor" that stays where you set it (with
CTRL-@). The mark is used to define a "region" of text.

PARAGRAPH
Text from one indented line to the next indented line.
This is important for the ESC Q command.

REGION
All the text between the cursor and the last "mark" that you set.
A region is what CTRL-W wipes out.

SCREEN
The full picture on the tv screen of the terminal.

SEARCH
To look for a given place in the text. ELLE will search either
backward or forward for a particular string. If you ask ELLE
to search for the string "he", you may be moved to the "he" in
the word "here" or the word "there" or the word "she"...

STRING
Just like "text", a series of characters. "String" usually
implies a specific short piece of text.
See SEARCH.

TEXT
Any group of characters (letters). A file is made of text;
a book is made of printed text; this paragraph is an
example of text. On the computer, text can only be composed
of ASCII characters.

TEXT EDITOR
A computer program that lets you change (modify, edit) text.
ELLE is a text editor that lets you work with text in buffers,
files, and messages.

WINDOW
A part of the screen that shows you what is in a buffer.
The screen is not very big, so usually you cannot see
all of the buffer. A real window does not let you see
everything outside; an ELLE window does not let you see
everything in a buffer, unless the buffer is small enough to all fit inside the window.
You can have one or two windows. With two windows, you can either look at two buffers at the same time, or at two different places in the same buffer.

WORD PROCESSOR
What a salesman calls a text editor.
ELLE KEYBOARD LAYOUT

Conventions:
\^  = beginning of
-  = previous
+  = next
v  = end of

Control keys (hold down CTRL while pressing):

<table>
<thead>
<tr>
<th>MARK</th>
<th>REGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESC</td>
<td></td>
</tr>
<tr>
<td>QUOTD</td>
<td>del</td>
</tr>
<tr>
<td>cont1</td>
<td>REGN</td>
</tr>
<tr>
<td>char</td>
<td></td>
</tr>
<tr>
<td>flwsw</td>
<td></td>
</tr>
<tr>
<td>TAB</td>
<td>Q</td>
</tr>
<tr>
<td></td>
<td>^</td>
</tr>
<tr>
<td></td>
<td>LINE</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CTRL</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>scroll</td>
</tr>
<tr>
<td></td>
<td>up</td>
</tr>
<tr>
<td></td>
<td>see</td>
</tr>
<tr>
<td></td>
<td>below</td>
</tr>
<tr>
<td></td>
<td>Z</td>
</tr>
</tbody>
</table>

mark REGN (same as CTRL-θ)

SPACE

- 33 -
Extended keys (precede each key with CTRL-X):
[the (c) indicates control character.]

| make | make |
| one | two |
| WNDOW | WNDOW |

---

ESC 1 2

| WRITE | WRITE | READ | make | insrt | del |
| to | REGN | new | REGN | FILE | adjnt |
| named | named | FILE | upper | at | blank |
| FILE | FILE | case | cursr | lines |
| TAB | Q | (c)W | (c)E | (c)R | T | Y | (c)U | (c)I | (c)O | P |

| SAVE | make | kill | make |
| curnt | new | buffr | REGN |
| FILE | BUFFR | lower |
| case |
| CTRL | A | (c)S | D | (c)F | G | H | J | K | (c)L |

| EXIT | SWAP | show |
| elle | MARK | BFRS |
| and | used |
| cursr |
| (c)Z | (c)X | C | V | (c)B | N | M |

SPACE

others: CTRL-X B = select buffer
CTRL-X F = set justification length to cursor position
CTRL-X O = go to other window
Escape keys (proceed each key with ESC):

ESC % [

fill | copy | TRNPO|UNDEL|upper|indnt|insrt|
|PARAG|REGN | words|prev |case |as |LINE|
|markd| |del |+ | - |

TAB Q W E R T Y U I O P

del + mark | upper|insrt|
+ |WORD |prgph|case |'C'|
|WORD |

CTRL A S D F G H J K L ;

caplz ^ - ^ v
+ |SCRN |WORD |BUFFR|BUFFR|

WORD

Z X C V B N M < >

SPACE

others: ESC CTRL-W Append next kill.