9 Stored commands and page layout

We have already used many immediate commands, such as DELETE CHARACTER and SET MARKER, and some command mode commands such as `SAVE` and `LOAD`.

VIEW also has a third set of commands which are entered in text mode, but do not have any effect at all as they are entered. These are stored commands, and their purpose is to influence the way the document is printed.

Perhaps the most obvious in its effect is `PE`, which means 'page eject'. This is a command to the printer to stop printing and eject the page.

Stored commands are used in text mode, and they appear in the left margin, under the two dots to the left of the ruler. It is as if they were marginal notes, telling the printer what to do as it progresses down the text.

The stored command page eject would be entered like this:

- Position the cursor on the line where you want the command.
- Press EDIT COMMAND (**SHIFT** **f8**).
- The cursor moves into the left margin.
- Type `PE` **RETURN**.

When the file is printed, as soon as the printer comes to the line on which you entered PE the page will eject.

Some of the other stored commands are used like this, some with numbers beside them, and some with text. For example suppose you want to tell the printer to work to a page length of 45 lines. The stored command for this is `PL` (page length) and it is entered in the margin just like `PE`. Beside it on the same line goes the number of lines: `PL 45`.

- Press EDIT COMMAND (**SHIFT** **f8**).
- The cursor moves into the left margin.
- Type `PL` **RETURN**.
- Type `45`.

Similarly if you want to centre the words ' TheEuropean Community' on a line, you can do so by typing it on the left and placing the stored command CE beside it, like this:

```
CE The European Community
```

If you want to range text to the right, as for example with instructions on a form, you would use the stored command RJ like this:

```
RJ Membership subscription £.........
RJ Handbook £.........
RJ Badge £.........
RJ Magazine £.........

RJ _____________

RJ TOTAL £____________
```

The effect when printed would be:

```
Membership subscription £.........
               Handbook £.........
                  Badge £.........
               Magazine £.........

                        _____________

                        £____________
```

Line spacing can also be controlled with stored commands. VIEW normally assumes solid text, but if you want part of your document with extra spacing between the lines you can use the command LS followed by the number of lines spacing, eg `LS 2`.

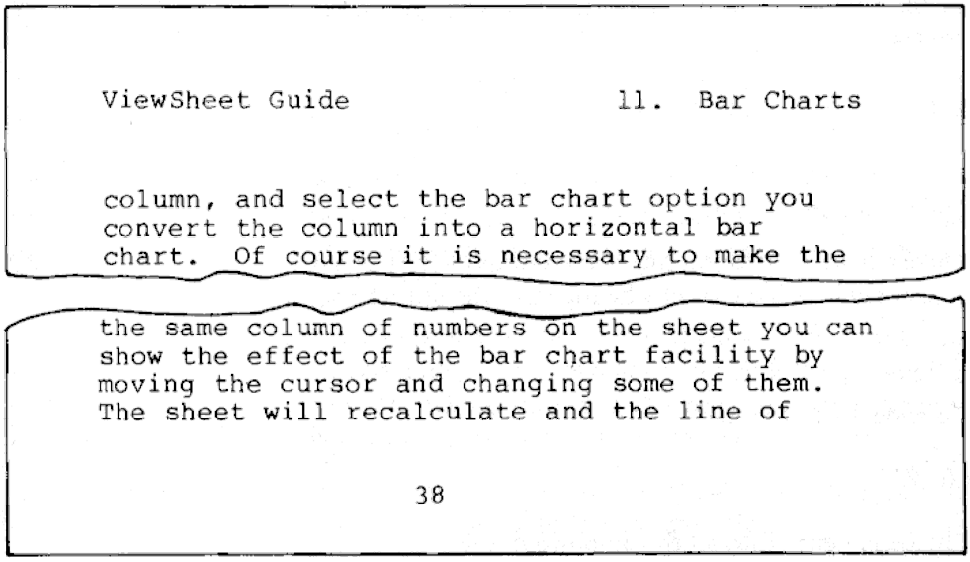
9.1 Book and report work

Stored commands come into their own when you are processing books and reports, although they can be very useful for letters too. In book and report work, you need to have at your disposal at least some of the features normally associated with the printing of books, such as top and bottom margin setting, lines at the head and foot of the page (headers and footers), and methods of emphasising type.

```
                                                    -  )
                                                    -  )T op margin, four lines
                                                    -  )
                                                    -  )
                    Creative Graphics - First draft -  Header, one line
                                                    -  )
                                                    -  )Header margin, four lines
                                                    -  )
                                                    -  )
Lissajoux figures

Lissajoux figures are fascinating patterns that can
form the basis for many weird and wonderful
programs. The method for drawing Lissajoux figures
is similar to the polar-coordinate method for
drawing a circle.

For the circle, the angle from which the x- and
y-coordinates are derived is the same. Different
Lissajoux figures are obtained when these angles
are out of phase.

There are many ways in which the basic Lissajoux
patterns can be enhanced. Here is a program that
uses straight lines to join the points that trace
out two intermeshing figures. The pattern obtained
depends on the random numbers chosen at lines 50
and 60.
                                                    -  )
                                                    -  )Footer margin, four lines
                                                    -  )
                                                    -  )
                                      Page 25       -  Footer, one line
                                                    -  )
                                                    -  )Bottom margin, four lines
                                                    -  )
                                                    -  )
```

VIEW provides all these. In its standard (default) layout it assumes four blank lines at the top of the page, followed by a header line, containing the title or series heading for the page. Below this are another four blank lines, after which the text begins. Footers (normally containing page numbers and report codes) are similarly separated from the text and from the bottom of the page by four blank lines.

Of course all these spacings can be changed and the headers and footers themselves can be cancelled if you wish. Remember that once you define a header or footer, VIEW will continue to print it until you issue other instructions. So if you define your header as ' CHAPTER3' you will have every page after that headed ' CHAPTER 3' until you redefine the header as ' CHAPTER 4' .



The illustration shows a page from a guide to the spreadsheet package ' ViewSheet'To make up this page all spacings have been reset, and headers and footers have been redefined.

The top margin has been reset to three spaces, instead of the default four, by the stored command `TM 3` which is used in the same way as the page length command described above.

The header margin, ie the lines between the header and the text, has also been reset with `HM 3`. Footer and bottom margins have been similarly reset to two and three lines respectively with the commands `FM 3` and `BM 2`.

The header has been defined so as to display both the title of the book and the title of the section. Headers always have three components: left, centre and right.

The define header command is `DH`, and when this is used it must always be followed by the three components divided by spacers (normally the slash /). If one of the components is blank, simply place two slashes together. So the general rule is:

`DH` /left component/centre component/right component/

In the present case the header would have left and right components but no centre:

```
DH /ViewSheet Guide//11. Bar Charts/
```

Footers can be set in exactly the same way as headers, and also have left, centre and right components.

Once a header or footer has been defined VIEW will print it on every page until it is cancelled. To cancel a header use the stored command:

```
HE
```

To cancel a footer use:

```
FO 0
```

The Guide goes into all this in more detail.

9.2 Number registers

VIEW has 26 number registers, labelled A to Z. Only two of these are allocated: P for pages and L for lines. The rest you can set as you wish.

In fact it is possible to set number register P to the number of your first, and it will automatically increase by one every time the printer completes a page. All you have to do then is to define your footer so as to print out the value of P and your page number will be printed automatically.

To set register P to value 1 for the first page, use the stored command `SR` (set register), like this:

```
SR P 1
```

You have then only to define the footer as the value of P. In order to distinguish between the character P and the value of register P you must place the vertical line symbol in front of it. So the footer is defined as:

```
DF //|P//
```

That is to say: no left component, centred page number, no right component.

Other stored commands which can cause number registers to be printed out are: `DH` (define header), `CE` (centre), `RJ` (right justify) and `LJ` (left justify). In fact the command LJ exists simply for the purpose of printing out registers, since VIEW always justifies left unless told to do otherwise.