NAME
>   concord − build concordance of input document

SYNOPSIS
>   **concord** [**−oa** | **−of**] [+
>   **−i** *ignored-words-file-name*] [**−is**] [+
>   **−c** [**−pn** *proper-names-file*]] |
>   [*input-file-name*]

MS-DOS SYNOPSIS
>   **concord** [*input-file-name*] [**/oa** | **/of**] [+
>   **/i** *ignored-words-file-name*] [**/is**] [+
>   **/c** [**/pn** *proper-names-file*]]

DESCRIPTION
>   If no *input-file-name* is specified, the input is taken from the standard input; otherwise the contents of the
>   file named by *input-file-name* is the input.
>
>   A concordance is an ordered list of the words in a document, with |
>   references to the places in the document in which each word appears. The order is dependent on the **−o**   +
>   command line option. If it is **−oa**, the order is alphabetical; if it is **−of**, the order is by frequency; the default +
>   is alphabetical.   +
>   Here, alphabetical order means ASCII collating order, except that if case is not significant, then the upper-
>   case letters are considered as being in the same position in the collating order as their lower-case |
>   correspondents. For complete generality, any character, even so-called non-printable characters, is handled, |
>   although nothing is done by this program to make them any more printable than the underlying system |
>   makes them. |
>
>   Here, a word's frequency is the number of times the word appears in the input document. In frequency   +
>   order, the words are listed most frequent first.   +
>
>   A document is a list of characters organized as follows:
>
>   A word is
> >   a list of any non-delimeter characters (including, but not restricted to, letters, digits, and hyphens) |
> >   surrounded by word |
> >   delimiters, i.e., white space (beginning- and end-of-file, control-L, newline, carriage-return, tab,
> >   space) or punctuation (comma (**,**), period (**.**), question mark (**?**), exclamation mark (**!**), quotation |
> >   mark (**"**), brackets (**[ ]**), parentheses (**( )**), braces (**{ }**), angle brackets (**< >**), and apostrophes (**' '**). |
>
>   A line is
> >   a list of words surrounded by line delimiters (beginning- and end-of-file, control-L, newline, car-
> >   riage return).
>
>   A page is
> >   a list of lines surrounded by page delimiters (beginning- and end-of-file, control-L).
>
>   A document is
> >   a list of pages surrounded by document delimiters (beginning- and end-of-file).
>
>   Note that if an *X* is built of a list of *Y*s, then *X* delimiters are also *Y* delimiters.
>
>   Hyphenated words may cross line and page boundaries. If the word preceding a line delimiter ends with a
>   hyphen, then the first word of the next line, which may be on the next page, is considered to be part of the
>   word from the previous line. For example:
>
> >   ... num-
>   ber
>
>   is considered the word "number".

Lines and pages are numbered only logically; that is, there are no line numbers and page numbers in the input document. The first *X*, *X* being a line or page, is numbered 1. The *X* that follows an *X* delimeter, *d* is of number *i*+1 when *i* is the number of the *X* that preceeds *d*. In the output listing, the logical line and page numbers are printed.

Only the first 72 characters of a word are considered significant in building the concordance; that is words that differ in the 73rd character are considered identical in the concordance list. Any word whose full |
length is not significant is flagged both in the output of the document and in the concordance list. A word   +
in the concordance list is flagged if at least one occurrence of the word is truncated from longer than 72   +
characters; a flagged word in the concordance list is necessarily of length 72.   +

Documents, pages, and lines may be empty. That is, each may contain no characters. This is manifested for |
pages and lines by having two consecutive delimiters of the right kind in the file. An empty document is |
simply an empty input file. |

A reference for a word consists of a page-number, line-number pair, the numbers of the page and line containing the beginning of the word. If a word appears more than once on a give line, then the list of references for a word will contain multiple copies of the same page-number, line-number pair.

When building the concordance for a document, case is significant, that is, "Concordance" is different from "concordance".

The program accepts a document as the input and outputs to standard output a concordance of that document. The output consists of

      1. a listing of the document with the lines numbered on the left and the pages divided by rows of equal signs and numbered both at the top and the bottom and

      2. the concordance table with a header announcing that the two columns of the table are the words and the list of references.

Normally, all words are listed in the concordance. If the −**i** option is present in the command line, the following word in the command line is taken as the name, *ignored-words-file-name*, of a file containing words |
not to be counted, i.e, the ignored words. The words in this file are separated by white space. |

If the −**is** option is present in the command line, then words that begin with anything other than a letter,   +
lower or upper case, are automatically ignored. Thus, in terms of the above definitions, words that begin   +
with a digit or a character that is not a word delimiter or punctuation are ignored.   +

Normally words that differ in the case (upper and lower) of their letters are counted as different in the concordance. If the −**c** option is present in the command line, then case distinctions are ignored, not only in building the concordance, but also in comparing for ignored words. Moreover, if case distinctions are ignored, but the −**pn** option is present in the command line, then the following word is taken as the name, |
proper-names-file, of a file containing proper names. The words in this file are separated by white space. |
This is to allow different case variations of the same word to be in one line. A proper name is |
a word that is to be distinguished in the concordance from other versions of the same word that differ only in the case of its letters. Thus, if case distinctions are ignored but there is a proper names file containing the word "Dov", then it is considered differerent from "dov" "dOv", "doV", "dOV", "DOv", and "DOV", all of which are considered the same. Obviously, in order to be meaningful, each word in the proper names file must have at least one upper-case letter.

If a word appears in the ignored words file and case distinctions are ignored, then all case variations of that   +
word are not counted in the concordance, and the appearance of any case variation of this word in the   +
proper names file is irrelevant.   +