```
(RPAQQ LAFITE-INDENTCOMS
       [(* * LAFITE-INDENT defines a function that will indent the current selection.)
        (FNS TEDIT-INDENT-ADD-INDENTATION TEDIT-INDENT-BREAK-LINE TEDIT-INDENT-BREAK-LONG-LINES
             TEDIT-INDENT-FIND-BREAKPOINT TEDIT-INDENT-REPLACE-SELECTION TEDIT-INDENT-SELECTION
             TEDIT-INDENT-SELECTION-KEEPING-LINEBREAKS TEDIT-INDENT-SEPERATE-PARAGRAPHS TEDIT-INDENT-SET-INDENT
             TEDIT-INDENT-STRIP-INDENTATION TEDIT-MAKE-LINES-EXPLICIT TEDIT-OPEN-LINE TEDIT-REMOVE-INDENT
             \TEDIT-INDENT-COUNT-SPACES \TEDIT-INDENT-FIND-PARAGRAPH-END \TEDIT-INDENT-SEPERATE-LINES
             \TEDIT-INDENT-SEPERATE-PARAGRAPHS)
        (INITVARS (*TEDIT-INDENT-STRING* (ALLOCSTRING 4 " "))
              (*TEDIT-INDENT-LINE-LENGTH* 72))
        [CONSTANTS (*eol-string* (CHARACTER (CHARCODE EOL]
        (GLOBALVARS *TEDIT-INDENT-STRING* *TEDIT-INDENT-LINE-LENGTH*)
        (P (OR (GETD 'TEDIT)
               (FILESLOAD TEDIT))
           (TEDIT.REMOVE.MENUITEM TEDIT.DEFAULT.MENU 'Indent)
           (TEDIT.ADD.MENUITEM TEDIT.DEFAULT.MENU '(Indent 'TEDIT-INDENT-SELECTION "Indent the current
                                                           selection" (SUBITEMS (Indent 'TEDIT-INDENT-SELECTION
                                                                          "Indent the current
                                                                          selection")
                                                       ("Indent & keep lines"
                                                              '
                                                       TEDIT-INDENT-SELECTION-KEEPING-LINEBREAKS
                                                                     "Indent the current
                                                                     selection, keeping existing
                                                                     line breaks")
                                                       ("Set indent"
                                                              'TEDIT-INDENT-SET-INDENT
                                                              "Set the indent string to a
                                                              new value")
                                                       (Unindent 'TEDIT-REMOVE-INDENT
                                                              "Remove one level of
                                                              indentation from the current
                                                              selection")
                                                       ("Open line" 'TEDIT-OPEN-LINE
                                                              "Open a blank line at the
                                                              current position")
                                                       ("Insert <RETURN>s"
                                                              'TEDIT-MAKE-LINES-EXPLICIT
                                                              "Insert real <RETURN>s at the
                                                              end of each line in the
                                                              current selection")
                                                       ("Break long lines"
                                                              '
                                                              TEDIT-INDENT-BREAK-LONG-LINES
                                                              "Break long lines by
                                                              inserting explicit
                                                              <RETURN>'s"])]


        (* * LAFITE-INDENT defines a function that will indent the current selection.)

(DEFINEQ

(TEDIT-INDENT-ADD-INDENTATION
  [LAMBDA (paragraph indent-string right-margin hanging-indent)          (* smL "15-Sep-86 16:47")

          (* * Return a string based on the given string but with the indentation changed by the given amount.
          -
          Break lines at or before the given right-margin. -
          If hanging-indent is given, then the first line is already indented by that amount.)

    (if [for i from 1 to (NCHARS paragraph) always (MEMB (NTHCHARCODE paragraph i)
                                                         (CONSTANT (LIST (CHARCODE SPACE)
                                                                         (CHARCODE EOL]
        then paragraph
        else (LET* [[old-indent (\TEDIT-INDENT-COUNT-SPACES paragraph (ADD1 (OR (STRPOS *eol-string* paragraph)
                                                                                 (NCHARS paragraph]
                    (new-indent (PLUS (NCHARS indent-string)
                                      old-indent))
                    (new-indent-string (CONCAT indent-string (ALLOCSTRING old-indent " "]
               (CONCATLIST (for string on (TEDIT-INDENT-BREAK-LINE (CONCAT (if (NUMBERP hanging-indent)
                                                                              then ""
                                                                              else indent-string)
```

```
                                                                    (TEDIT-INDENT-STRIP-INDENTATION
                                                              paragraph))
                                                 (DIFFERENCE right-margin (PLUS new-indent (OR (NUMBERP
                                                                                                 hanging-indent
                                                                                                 )
                                                                                             0)))
                                                 (DIFFERENCE right-margin new-indent))
                              join (if (CDR string)
                                       then (LIST (CAR string)
                                                  *eol-string* new-indent-string)
                                       else (LIST (CAR string)])
```

(**TEDIT-INDENT-BREAK-LINE**
```
  [LAMBDA (string first-line-max-length max-length)                    (* smL "26-Sep-86 19:42")

        (* * Return a list of strings equivilent to the input string, but with no single string containing more than max-length characters
        and the first line having no more than first-line-max-length characters)

    (if (OR (NULL string)
            (STRING-EQUAL string "")
            (STRING-EQUAL string *eol-string*))
        then NIL
      else (LET ((existing-eol (STRPOSL [DEFERREDCONSTANT (MAKEBITTABLE (LIST (CHARCODE EOL]
                                        string)))
                 (if (OR (AND (NULL existing-eol)
                              (LEQ (NCHARS string)
                                   first-line-max-length))
                         (AND (NUMBERP existing-eol)
                              (EQ existing-eol (NCHARS string))
                              (LEQ existing-eol first-line-max-length)))
                     then                                               (* the string fits on a single line)
                          (LIST string)
                   else (LET [(break-point (if (AND (NUMBERP existing-eol)
                                                    (LESSP existing-eol first-line-max-length))
                                               then existing-eol
                                               else (TEDIT-INDENT-FIND-BREAKPOINT string first-line-max-length]
                          (CONS (OR (SUBSTRING string 1 (SUB1 break-point))
                                    "")
                                (TEDIT-INDENT-BREAK-LINE (OR (SUBSTRING string (ADD1 break-point))
                                                             "")
                                 max-length max-length])
```

(**TEDIT-INDENT-BREAK-LONG-LINES**
```
  [LAMBDA (text-stream explicit-paragraph-breaks?)                     (* smL "21-Jan-87 16:03")

        (* * Break the current selection into explicit lines, each having no more than *TEDIT-INDENT-LINE-LENGTH* characters.
        -
        If the flag *TEDIT-INDENT-KEEP-LINE-BREAKS* is false, existing line breaks in the current selection are removed.
        -
        This is intended to be used in Lafite, where one wants to indent a piece of a forwarded document, but can be used in any
        TEdit document)

    (LET ((selection (TEDIT.GETSEL text-stream)))
         (TEDIT-INDENT-REPLACE-SELECTION
          text-stream selection
          (CONCATLIST (for string on (TEDIT-INDENT-SEPERATE-PARAGRAPHS (TEDIT.SEL.AS.STRING text-stream
                                                                                selection)
                                       explicit-paragraph-breaks?)
                          bind [hanging-indent _ (AND (NOT (EQP (fetch CHAR1 of (CAR (fetch L1 of selection)))
                                                                (fetch CH# of selection)))
                                                      (DIFFERENCE (fetch CH# of selection)
                                                                  (fetch CHAR1 of (CAR (fetch L1 of selection)]
                          join (PROG1 (LIST (TEDIT-INDENT-ADD-INDENTATION (CAR string)
                                               "" *TEDIT-INDENT-LINE-LENGTH* hanging-indent)
                                            *eol-string*)
                                      (SETQ hanging-indent NIL])
```

(**TEDIT-INDENT-FIND-BREAKPOINT**
```
  [LAMBDA (string max-length)                                          (* smL " 8-Sep-86 14:23")

        (* * Return the position to break string so that it will contain no more than max-length characters -
        if there is no whitespace before max-length characters, break it at the first whitespace after max-length)

    (LET [(white-space-chars (DEFERREDCONSTANT (MAKEBITTABLE (LIST (CHARCODE SPACE)
                                                                   (CHARCODE TAB)
                                                                   (CHARCODE EOL]
         (OR (STRPOSL white-space-chars string max-length NIL T)
             (STRPOSL white-space-chars string max-length NIL NIL)
             (ADD1 (NCHARS string])
```

(**TEDIT-INDENT-REPLACE-SELECTION**
```
  [LAMBDA (text-stream selection new-text)                             (* smL " 8-Sep-86 17:44")
```

(* * Replace the given selection in the text stream with the new-text.
End up with the new-text selected.)

```
(LET ((start (fetch CH# of selection)))
     (TEDIT.SETSEL text-stream start (fetch DCH of selection)
            'LEFT T)
     (TEDIT.INSERT text-stream new-text)
     (TEDIT.SETSEL text-stream start (NCHARS new-text)
             'RIGHT])
```

(**TEDIT-INDENT-SELECTION**
[LAMBDA (text-stream explicit-paragraph-breaks?)   (* smL "21-Jan-87 16:00")

(* * Indent the current selection by prefacing each line with the value of *TEDIT-INDENT-STRING*, and inserting line breaks
after each *TEDIT-INDENT-LINE-LENGTH* characters. -
If the flag *TEDIT-INDENT-KEEP-LINE-BREAKS* is false, existing line breaks in the current selection are removed.
-
This is intended to be used in Lafite, where one wants to indent a piece of a forwarded document, but can be used in any
TEdit document)

```
(LET ((selection (TEDIT.GETSEL text-stream)))
     (TEDIT-INDENT-REPLACE-SELECTION
      text-stream selection
      (CONCATLIST (for string on (TEDIT-INDENT-SEPERATE-PARAGRAPHS (TEDIT.SEL.AS.STRING text-stream
                                                                       selection)
                                         explicit-paragraph-breaks?)
                   bind [hanging-indent _ (AND (NOT (EQP (fetch CHAR1 of (CAR (fetch L1 of selection)))
                                                       (fetch CH# of selection)))
                                         (DIFFERENCE (fetch CH# of selection)
                                                (fetch CHAR1 of (CAR (fetch L1 of selection]
                   join (PROG1 (LIST (TEDIT-INDENT-ADD-INDENTATION (CAR string)
                                               *TEDIT-INDENT-STRING* *TEDIT-INDENT-LINE-LENGTH* hanging-indent
                                               )
                                    *eol-string*)
                               (SETQ hanging-indent NIL])
```

(**TEDIT-INDENT-SELECTION-KEEPING-LINEBREAKS**
[LAMBDA (text-stream)   (* smL "12-Sep-86 16:58")

(* * Indent the current selection, keeping current line breaks)

```
(TEDIT-INDENT-SELECTION text-stream T])
```

(**TEDIT-INDENT-SEPERATE-PARAGRAPHS**
[LAMBDA (string explicit-paragraph-breaks?)   (* smL "12-Sep-86 09:54")

(* * Return a list of strings, each comprising a seperate paragraph, that taken together make up the given string.
-
If explicit-paragraph-breaks? is true, paragraphs are delimited by <RETURN>'s, otherwise paragraphs are delimited by a
change in indentation after the second line.)

```
(if (NOT (STRINGP string))
    then NIL
  elseif explicit-paragraph-breaks?
    then (\TEDIT-INDENT-SEPERATE-LINES string NIL)
  else (\TEDIT-INDENT-SEPERATE-PARAGRAPHS string NIL])
```

(**TEDIT-INDENT-SET-INDENT**
[LAMBDA (text-stream)   (* smL "12-Sep-86 17:09")

(* * Prompt the user for a new indentation string)

```
(LET* ((window (fetch \WINDOW of (TEXTOBJ text-stream)))
       (pwindow (if window
                    then (GETPROMPTWINDOW (if (LISTP window)
                                             then (CAR window)
                                           else window))
                  else PROMPTWINDOW)))
      (CLEARW pwindow)
      (SETQ *TEDIT-INDENT-STRING* (PROMPTFORWORD "New indent string: " *TEDIT-INDENT-STRING* NIL pwindow NIL
                                        NIL (LIST (CHARCODE EOL])
```

(**TEDIT-INDENT-STRIP-INDENTATION**
[LAMBDA (paragraph first-line-too?)   (* smL "15-Sep-86 17:03")

(* * Remove indentation from the given string)

```
(bind (string _ paragraph)
      (eol-pos _ 1) while (SETQ eol-pos (STRPOS *eol-string* string))
   do [SETQ string (if (EQP eol-pos (NCHARS string))
                       then (SUBSTRING string 1 (SUB1 eol-pos))
                     else (CONCAT (SUBSTRING string 1 (SUB1 eol-pos))
```

```
                                      " "
                             (OR [SUBSTRING string (PLUS 1 eol-pos (\TEDIT-INDENT-COUNT-SPACES
                                                                          string
                                                                          (ADD1 eol-pos]
                             ""]
        finally (RETURN (if first-line-too?
                            then (OR (SUBSTRING string (ADD1 (\TEDIT-INDENT-COUNT-SPACES string 1)))
                                     "")
                          else string])
```

(**TEDIT-MAKE-LINES-EXPLICIT**
```
  [LAMBDA (text-stream)                                         (* smL " 8-Sep-86 18:20")
```

(* * Take the current selection and replace all TEdit end-of-lines with explicit line breaks.
-
This is intended to be used in Lafite, where it is sometimes nice to know that anyone receiving the msg will see the same
line breaks that you see. see, but can be used in any TEdit document)

```
    (LET ((selection (TEDIT.GETSEL text-stream)))
        [for i in (bind (this-line _ (CAR (fetch L1 of selection)))
                        [last-line _ (CAR (LAST (fetch LN of selection)]
                  repeatuntil (PROGN (SETQ this-line (fetch NEXTLINE of this-line))
                                     (EQ this-line last-line))
                  collect (fetch CHARLIM of this-line))
          do (TEDIT.SETSEL text-stream i 1 'LEFT T)
             (TEDIT.INSERT text-stream (CONSTANT (CHARACTER (CHARCODE EOL]
        (TEDIT.SETSEL text-stream selection NIL 'RIGHT])
```

(**TEDIT-OPEN-LINE**
```
  [LAMBDA (text-stream)                                         (* smL "17-Sep-86 11:13")
```

(* * Open a new line at the current position.)

```
    (LET ((selection (TEDIT.GETSEL text-stream)))
        (TEDIT.INSERT text-stream (CONCAT *eol-string* (ALLOCSTRING [DIFFERENCE (fetch CH# of selection)
                                                                    (fetch CHAR1
                                                                       of (CAR (fetch L1 of selection]
                                                       " ")))
        (if (ZEROP (fetch DCH of selection))
            then (TEDIT.SETSEL text-stream selection])
```

(**TEDIT-REMOVE-INDENT**
```
  [LAMBDA (text-stream)                                         (* smL "15-Sep-86 17:03")
```

(* * Remove the indentation from the current selection)

```
    (LET ((selection (TEDIT.GETSEL text-stream)))
        (TEDIT-INDENT-REPLACE-SELECTION text-stream selection (CONCATLIST (for paragraph
                                                                             in (
                                                                             TEDIT-INDENT-SEPERATE-PARAGRAPHS
                                                                                (TEDIT.SEL.AS.STRING
                                                                                   text-stream selection))
                                                                             join (LIST (
                                                                                   TEDIT-INDENT-STRIP-INDENTATION
                                                                                      paragraph T)
                                                                                   *eol-string*])
```

(\TEDIT-INDENT-COUNT-SPACES
```
  [LAMBDA (string start-pos)                                    (* smL "12-Sep-86 14:29")
```

(* * Count the number of spaces following position start-pos in string)

```
    (if (NOT (STRINGP string))
        then 0
      else (DIFFERENCE [for i from start-pos bind (max-pos _ (NCHARS string))
                          thereis (OR (GREATERP i max-pos)
                                      (NOT (EQP (NTHCHARCODE string i)
                                                (CHARCODE SPACE]
                         start-pos])
```

(\TEDIT-INDENT-FIND-PARAGRAPH-END
```
  [LAMBDA (string paragraph-indent after-pos)                   (* smL "15-Sep-86 15:53")
```

(* * Find the end of paragraph that has the given indent and contains the given position in the string)

```
    (LET [(eol-pos (STRPOS *eol-string* string (ADD1 after-pos]
        (if (NULL eol-pos)
            then (ADD1 (NCHARS string))
          elseif (for i from (ADD1 after-pos) to (SUB1 eol-pos) always (EQP (CHARCODE SPACE)
                                                                            (NTHCHARCODE string i)))
            then after-pos
          elseif (EQP eol-pos (NCHARS string))
```

```
                then eol-pos
           elseif (EQP paragraph-indent (\TEDIT-INDENT-COUNT-SPACES string (ADD1 eol-pos)))
              then (\TEDIT-INDENT-FIND-PARAGRAPH-END string paragraph-indent eol-pos)
           else eol-pos])
```

(**TEDIT-INDENT-SEPERATE-LINES**
```
  [LAMBDA (remaining-string current-lines)                              (* smL "21-Jan-87 15:58")
```

          (* * Return a list of lines that make up the remaining-string, with the reverse of current-lines appended to the front)

```
    (if (NOT (STRINGP remaining-string))
       then (OR (DREVERSE current-lines)
                (LIST ""))
      else (LET [(eol-pos (OR (STRPOS *eol-string* remaining-string)
                             (ADD1 (NCHARS remaining-string]
               (\TEDIT-INDENT-SEPERATE-LINES (SUBSTRING remaining-string (ADD1 eol-pos))
                   (CONS (OR (SUBSTRING remaining-string 1 (SUB1 eol-pos))
                            "")
                        current-lines])
```

(**TEDIT-INDENT-SEPERATE-PARAGRAPHS**
```
  [LAMBDA (string current-paragraphs)                                   (* smL "15-Sep-86 15:54")
```

          (* * Return a list of strings, each comprising a seperate paragraph, that taken together make up the given string.
          Paragraphs are delimited by a change in indentation after the second line, or a blank line.)

```
    (if (NOT (STRINGP string))
       then (DREVERSE current-paragraphs)
      else (LET ((eol-pos (STRPOS *eol-string* string)))
               (if (NULL eol-pos)
                  then (DREVERSE (CONS string current-paragraphs))
                elseif (for i from 1 to (SUB1 eol-pos) always (EQP (CHARCODE SPACE)
                                                                   (NTHCHARCODE string i)))
                  then (\TEDIT-INDENT-SEPERATE-PARAGRAPHS (SUBSTRING string (ADD1 eol-pos))
                           (CONS "" current-paragraphs))
                elseif (EQP eol-pos (NCHARS string))
                  then (DREVERSE (CONS string current-paragraphs))
                else (LET ((para-end-pos (\TEDIT-INDENT-FIND-PARAGRAPH-END string (\TEDIT-INDENT-COUNT-SPACES
                                                                                     string
                                                                                     (ADD1 eol-pos))
                                             eol-pos)))
                         (\TEDIT-INDENT-SEPERATE-PARAGRAPHS (SUBSTRING string (ADD1 para-end-pos))
                             (CONS (OR (SUBSTRING string 1 (SUB1 para-end-pos))
                                      "")
                                  current-paragraphs])
```

```
)

(RPAQ? *TEDIT-INDENT-STRING* (ALLOCSTRING 4 " "))

(RPAQ? *TEDIT-INDENT-LINE-LENGTH* 72)

(DECLARE%: EVAL@COMPILE

(RPAQ *eol-string* (CHARACTER (CHARCODE EOL)))

[CONSTANTS (*eol-string* (CHARACTER (CHARCODE EOL]
)

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS *TEDIT-INDENT-STRING* *TEDIT-INDENT-LINE-LENGTH*)
)

(OR (GETD 'TEDIT)
    (FILESLOAD TEDIT))

(TEDIT.REMOVE.MENUITEM TEDIT.DEFAULT.MENU 'Indent)

[TEDIT.ADD.MENUITEM TEDIT.DEFAULT.MENU '(Indent 'TEDIT-INDENT-SELECTION "Indent the current selection"
                                            (SUBITEMS (Indent 'TEDIT-INDENT-SELECTION "Indent the current
                                                           selection")
                                                   ("Indent & keep lines"
                                                           'TEDIT-INDENT-SELECTION-KEEPING-LINEBREAKS
                                                           "Indent the current selection, keeping existing
                                                           line breaks")
                                                   ("Set indent" 'TEDIT-INDENT-SET-INDENT "Set the indent
                                                           string to a new value")
                                                   (Unindent 'TEDIT-REMOVE-INDENT "Remove one level of
                                                           indentation from the current selection")
                                                   ("Open line" 'TEDIT-OPEN-LINE "Open a blank line at the
                                                           current position")
                                                   ("Insert <RETURN>s" 'TEDIT-MAKE-LINES-EXPLICIT "Insert
                                                           real <RETURN>s at the end of each line in the
                                                           current selection")
```

                                        ("Break long lines" 'TEDIT-INDENT-BREAK-LONG-LINES
                                         "Break long lines by inserting explicit
                                         <RETURN>'s"]

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FUNCTION INDEX

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