NAME

   getdelim, **getline** - get a line from a stream

LIBRARY

   Standard C Library (libc, -lc)

SYNOPSIS

   #include <stdio.h>

   ssize_t
   getdelim(*char ** restrict linep*, *size_t * restrict linecapp*, *int delimiter*, *FILE * restrict stream*);

   ssize_t
   getline(*char ** restrict linep*, *size_t * restrict linecapp*, *FILE * restrict stream*);

DESCRIPTION

   The **getdelim**() function reads a line from *stream*, delimited by the character *delimiter*. The **getline**()
   function is equivalent to **getdelim**() with the newline character as the delimiter. The delimiter character
   is included as part of the line, unless the end of the file is reached.

   The caller may provide a pointer to a malloced buffer for the line in **linep*, and the capacity of that
   buffer in **linecapp*. These functions expand the buffer as needed, as if via **realloc**(). If *linep* points to a
   NULL pointer, a new buffer will be allocated. In either case, **linep* and **linecapp* will be updated
   accordingly.

RETURN VALUES

   The **getdelim**() and **getline**() functions return the number of characters stored in the buffer, excluding the
   terminating NUL character. The value -1 is returned if an error occurs, or if end-of-file is reached.

EXAMPLES

   The following code fragment reads lines from a file and writes them to standard output. The **fwrite**()
   function is used in case the line contains embedded NUL characters.

   ```
   char *line = NULL;
   size_t linecap = 0;
   ssize_t linelen;
   while ((linelen = getline(&line, &linecap, fp)) > 0)
           fwrite(line, linelen, 1, stdout);
   free(line);
   ```

ERRORS

These functions may fail if:

[EINVAL]   Either *linep* or *linecapp* is NULL.

[EOVERFLOW]   No delimiter was found in the first SSIZE_MAX characters.

These functions may also fail due to any of the errors specified for **fgets**() and **malloc**().

SEE ALSO

fgetln(3), fgets(3), malloc(3)

STANDARDS

The **getdelim**() and **getline**() functions conform to IEEE Std 1003.1-2008 ("POSIX.1").

HISTORY

These routines first appeared in FreeBSD 8.0.

BUGS

There are no wide character versions of **getdelim**() or **getline**().