

NAME

read - read from file

SYNOPSIS

read (*fd*, *buffer*, *nbytes*)
char **buffer*;

DESCRIPTION

A file descriptor is a word returned from a successful *open*, *creat*, or *pipe* call. *Buffer* is the location of *nbytes* contiguous bytes into which the input will be placed. It is not guaranteed that all *nbytes* bytes will be read; for example if the file refers to a typewriter at most one line will be returned. In any event, the number of characters read is returned (in *r0*).

If the returned value is 0, then end-of-file has been reached.

SEE ALSO

open(2), *dup*(2), *close*(2), *creat*(2), *pipe*(2), *write*(2)

DIAGNOSTICS

As mentioned, 0 is returned when the end of the file has been reached. If the read was otherwise unsuccessful the error bit (c-bit) is set. Many conditions can generate an error: physical I/O errors, bad buffer address, preposterous *nbytes*, file descriptor not that of an input file, etc. From C, a -1 return indicates an error.

ASSEMBLER

(*read* = 3.)
(file descriptor in *r0*)
sys read; buffer; nbytes
(byte count in *r0*)