

NAME

read – read from file

SYNOPSIS

(read = 3.)

(file descriptor in r0)

sys read; buffer; nbytes

read(fildes, buffer, nbytes)

char *buffer;

DESCRIPTION

A file descriptor is a word returned from a successful *open*, *creat*, *dup*, 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 (II), creat (II), dup (II), pipe (II)

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. From C, a -1 return indicates the error.