

NAME

`dup` – duplicate an open file descriptor

SYNOPSIS

(`dup` = 41.; not in assembler)

(file descriptor in `r0`)

sys `dup`

`dup(fildes)`

`int fildes;`

DESCRIPTION

Given a file descriptor returned from an *open*, *pipe*, or *creat* call, *dup* will allocate another file descriptor synonymous with the original. The new file descriptor is returned in `r0`.

Dup is used more to reassign the value of file descriptors than to genuinely duplicate a file descriptor. Since the algorithm to allocate file descriptors returns the lowest available value between 0 and 9, combinations of *dup* and *close* can be used to manipulate file descriptors in a general way. This is handy for manipulating standard input and/or standard output.

SEE ALSO

`creat(II)`, `open(II)`, `close(II)`, `pipe(II)`

DIAGNOSTICS

The error bit (c-bit) is set if: the given file descriptor is invalid; there are already 10 open files. From C, a -1 returned value indicates an error.