

**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.