

fs_open: find the filename in the root dir entries; if found, set the entry in file table to state OPEN, pointer to the beginning of the file, directory entry and inode according to these saved in the directory.

fs_close: set state in the file table entry to CLOSED.

fs_create: if no existing file with the same name, get a new unused inode, set its attributes and put it into directory entry.

fs_seek: add offset to the current file pointer in the file table.

fs_read: first find the starting and ending block of the sequence to be read, then read from an offset of the starting block calculated using file pointer to the offset, read the blocks in the middle, read the last block up to the offset calculated using file pointer plus bytes to read.

fs_write: like fs_read (direction of copying reversed) but need to set mask bit to mark block used.