QUESTION - 1

if (argc > 3 || (argc == 3 && strcmp(argv[1], "-L")))

{

invalidRequests();

}

checks whether the given argument is valid or not

validRequests(argc, argv);

executes when given arguments are valid

\* functions and structure used \*

**struct stat buf;**

This structure is defined in sys/stat

**struct dirent \*dp;**

This is a structure type used to return information about directory entries. It contains the following fields:

**readdir();**

The **readdir**() function returns a pointer to a *dirent* structure

representing the next directory entry in the directory stream pointed

to by *dirp*. It returns NULL on reaching the end of the directory

stream or if an error occurred.

**opendir();**

The opendir() function opens a directory stream corresponding to the

directory *name*, and returns a pointer to the directory stream. The

stream is positioned at the first entry in the directory**.**

**stat();**

**stat**() function is used to list properties of a file identified by path . It reads all file properties and dumps to buf structure.

**lstat();**

The **lstat()** function gets status information about a specified file and places it in the area of memory pointed to by *buf*. If the named file is a symbolic link, **lstat()** returns information about the symbolic link itself.

The following POSIX macros are defined to check the file type using the *st\_mode* field:

**S\_ISDIR()** to check for a directory

**S\_ISLNK()** to check whether a file has a symbolic link or not

**readlink();**

**readlink**() places the contents of the symbolic link *pathname* in the

buffer *buf*, which has size *bufsiz*. **readlink**() does not append a null

byte to *buf*. It will (silently) truncate the contents (to a length

of *bufsiz* characters), in case the buffer is too small to hold all of

the contents.

closedir();

The *closedir*() function shall close the directory stream referred to by the argument *dirp*. Upon return, the value of *dirp* may no longer point to an accessible object of the type **DIR**. If a file descriptor is used to implement type **DIR**, that file descriptor shall be closed.