

## CS341 #29 – Files, Directories, symlinks #3

What do the following do?

```
chmod 600 fileA
chown angrave fileB
chown -R angrave .
chmod o-rwx fileC    # Hint: u=user,g=group,o=other
```

How do I find out if an inode is a regular file or directory or something else?

Problem: How do I recurse into subdirectories? (+ Fix any errors )

```
void dirlist(char*path) {
    struct dirent* dp;
    DIR* dirp = opendir(path);

    while ((dp = readdir(dirp)) != NULL) {
        char newpath[strlen(path)+strlen(dp->d_name)+1];
        sprintf(newpath,"%s/%s", newpath, dp->d_name);
        printf("%s%s \n", dp->d_name);

        dirlist(newpath);
    }
}
int main(int argc,
char**argv){dirlist(argv[1]);return 0;}
```

Fixes required / Notes:

> **Symbolic links?**

How do they work?

How do I make one?

How do I use readlink?

Why use lstat() instead of stat() ?

> **Symbolic vs Hard links Gameshow**

advantages?

disadvantages?

> Why would I want to set a directory's sticky bit?

> How do I set the sticky bit?

> Which directory will have the sticky bit set?

**> What does 'env' do?**

**> Why do shell programs start with**

`#!/usr/bin/env python`

**> How do I make 'hidden' files i.e. not listed by "ls"? How do I list them?**

**> File permissions and directories**

**>File system mounts and virtual file systems**