Chapter 8

8.1 Use the following command sequence.

```
$ ln ~/Ch11Ex1 ~/Ch11Ex1.hard
$ ls -il ~/Ch11Ex1 ~/Ch11Ex1.hard
[ command output ]
$
```

I used the first field (the field that shows the inode number for a file) to varify that the hard link has been created. The two files have the same inode number.

8.2 The `ln /tmp ~/tmp` command is used to create a hard link, called ~/tmp, to the /tmp directory. The command fails for two reasons. One, you cannot create a hard link to a directory (only the superuser can do so). Second, the /tmp directory is not on the same file system that you home directory is, and you cannot create hard links across file systems.

8.3 Use the following command sequence.

```
$ ln -s ~/Ch11Ex1 ~/Ch11Ex1.soft
$ ls -il ~/Ch11Ex1 ~/Ch11Ex1.soft
[ command output ]
$
```

I used the first field (the field that shows the inode number for a file) to varify that the hard link has been created. The two files have different inode numbers. Additionally, the link file has the type link (l). Also, the last field (that shows the name of the file) is /users/faculty/Ch11Ex1.soft -> /users/faculty/Ch11Ex1.soft.

8.4 The `ln -s /tmp ~/tmp` command is used to create a soft link, called ~/tmp, to the /tmp directory. The command works fine because you can create a soft link to a file. Also, soft links can be created across file systems.