

# 【Linux Programming】 Day7

▼ Class	Understanding Linux/Unix Programming
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## 【Ch3】 Directories and File Properties: Looking through ls

### 3.2 Question 1: What does ls do?

#### 3.2.1 Listing Other Directories, Reporting on Other Files

We can ask `ls` for information about files in other directories by specifying directory names and filenames on the command line:

Asking ls about Other Directories and Their Files	
Example	Action
<code>ls /tmp</code>	list names of files in /tmp directory
<code>ls -l docs</code>	show attributes of files in docs directory
<code>ls -l ../Makefile</code>	show attributes of ../Makefile
<code>ls *.c</code>	list names of files matching pattern *.c

If an argument is a directory, `ls` lists its contents. If an argument is a file, `ls` lists its name or attributes.

#### 3.2.2 Popular Command-Line Options

Some popular `ls` command-line options are:

Command	Action
<code>ls -a</code>	shows "."-files
<code>ls -lu</code>	shows last-read time
<code>ls -s</code>	shows size in blocks
<code>ls -t</code>	sorts in time order
<code>ls -F</code>	shows file types

### 3.2.3 A Summary

`ls` does two things:

1. Lists the contents of directories
2. Displays information about files

`ls` figures out if a command-line argument is a file or a directory. If we are to write a version of `ls`, we need to master three skills:

- How to list the contents of a directory
- How to obtain and display properties of a file
- How to determine if a name refers to a file or a directory