

## Lab: ls

1. The `getopt()` is a C library function used to parse the command-line options:
  - 1) briefly describe how to use it in your own word
  - 2) write a test code using `getopt()`
    - refer to man page
2. Modify `ls1.c` as follows:
  - 1) it sorts the list of files.
    - using `qsort` function
  - 2) Standard `ls` supports a `-r` option to **print the list in reverse order**. Add that option.
  - 3) Some versions of `ls` supports a `-q` option for "quick" output. This option causes `ls` **not to sort** the list. This option is useful when a directory contains an enormous number of files, so many that even a quick sort takes significant time.

```
# ./ls1
# ./ls1 -r
# ./ls1 -q
```

### File uploading on LMS:

- (1) doc file (including screen captures of execution of codes)
- (2) source codes