

*Pre-Lab Theory:***SYNOPSIS**

```
#include <dirent.h>
#include <dirent.h>
#include <sys/stat.h>
char *getcwd(char *buf, size_t size);
DIR *opendir(const char *dirname);
struct dirent *readdir(DIR *dirp);
int closedir(DIR *dirp);
void rewinddir(DIR *dirp);
int lstat(const char *restrict path, struct stat *restrict buf);
int stat(const char *restrict path, struct stat *restrict buf);
```

The struct stat structure, which is defined in sys/stat.h, contains at least the following

members.

```
dev_t st_dev; /* device ID of device containing file */
ino_t st_ino; /* file serial number */
mode_t st_mode; /* file mode */
nlink_t st_nlink; /* number of hard links */
uid_t st_uid; /* user ID of file */
gid_t st_gid; /* group ID of file */
off_t st_size; /* file size in bytes (regular files) */
/* path size (symbolic links) */
time_t st_atime; /* time of last access */
time_t st_mtime; /* time of last data modification */
time_t st_ctime; /* time of last file status change */
```

***Task 1:***

*Write the code to Print the current working directory path to the standard output.*

***Output:******Task 2:***

*Write the program to print the list of contents in the current working directory to the standard output.*

***Output:***

**Task 3:**

*Create a subdirectory in the current working directory. Modify the code in Task 2 to detect that subdirectory and print against its name “It’s a directory”*

**Output Task 3:****Task 4:**

*Modify task 2 to print the file status information against each file in the list.*

