```c
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <sys/stat.h>
#include <sys/types.h>
#include <errno.h>
#include <dirent.h>

int main(int argc, char *argv[])
{
        struct stat statBuf;

        if (argc < 2) {
                printf ("Usage: directory name required\n");
                exit(1);
        }

        uint file_index = 1, id_flag = 0, inode_flag = 0;

        // Set the flags based on the args passed
        if (argc == 3)
        {
                file_index = 2;
                if (!strcmp(argv[1], "-n"))
                        id_flag = 1;
                else if (!strcmp(argv[1], "-i"))
                        inode_flag = 1;
                else if (!strcmp(argv[1], "-ni") || !strcmp(argv[1], "-in")) {
                        id_flag = 1;
                        inode_flag = 1;
                }
        }
        if (stat (argv[file_index], &statBuf) < 0) {
                perror ("Error opening directory.");
                exit(1);
        }

        if (S_ISREG(statBuf.st_mode))
        {
                //Exact words from the lab are:
                //"Your program should accept as input the name of any directory"
                printf("Not a directory. Please provide a directory.\n");
                exit(1);
        }

        DIR *dirPtr;
        struct dirent *entryPtr;

        dirPtr = opendir(argv[file_index]);
        while ( (entryPtr = readdir(dirPtr)) ) {
                if (id_flag || inode_flag) {
                        stat(entryPtr->d_name, &statBuf);
                        if (id_flag)
                                printf("Group: %u  User: %u\t", statBuf.st_gid, stat
Buf.st_uid);
                        if (inode_flag)
                                printf("Inode #: %ld\t", entryPtr->d_ino);
                }
                printf("%s\n", entryPtr->d_name);

        }
        closedir(dirPtr);
        printf("\n");
        return 0;
}
```