

## ECE177: Programming I: From C...

### Lab #1 — WSL Basics

## 1 Introduction

1. Before starting to write code some Linux commands will be introduced to help you stay organized in WSL. Use the following instructions to learn how to create a new “lab2” directory and make a copy of the “hello.c” program from lab1 as a starting point for this lab.

- (a) Open WSL. Make sure the command line looks like this:

```
[Your Username] : ~$
```

- (b) NOTE: if instead of the tilde (~) you see something like `WINDOWS/system32` reopen `wsl` by searching your machine for “Ubuntu” and opening that instead. The tilde means you are in your home directory.

- (c) To list the contents of your current directory (home directory) you can use the list command: `ls` by typing the following:

```
ls
```

- (d) NOTE: if you completed the WSL setup lab you should see “hello.c” somewhere in there.

- (e) Create a directory using the make directory command: `mkdir`. In order to make a directory called “lab2” use the following:

```
mkdir lab2
```

- (f) Now if you retype the list command (`ls`) you should see the new directory called “lab2”. In order to copy `hello.c` into the lab2 directory we can use the copy command: `cp` by typing the following:

```
cp hello.c lab2
```

- (g) NOTE: the command means: copy `hello.c` to the lab2 directory

- (h) Next enter the lab2 directory with the change directory command: `cd` by typing the following:

```
cd lab1
```

- (i) Lastly we will rename `hello.c` using the move command: `mv`

```
mv hello.c lab1.c
```

- (j) NOTE: `hello.c` can be renamed to anything as long as the `.c` is maintained.

- (k) You are now in the lab2 directory and can use `lab2.c` as a starting point. It is a good idea to use previous labs as starting points for any new labs.

## 2 Command Summary

1. ls: list contents of current directory.
2. mkdir: make a new directory. The new directory's name must be specified.
3. cd: change to specified directory.
4. cp: copy file to another directory or file.
5. mv: give existing file a new name
6. gcc: Code compilation: gcc yourCode.c  
NOTE: this will compile yourCode.c and produce an a.out file in your current directory
7. Alternatively use: gcc -o yourCode yourCode.c  
NOTE: this will compile yourCode.c and produce file called yourCode in your current directory
8. Running code: ./yourCode