basic_linux_commands

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1 Basic Linux Commands

The main commands you need to learn to succeed in the Robolympics project are `cd`, `ls`, `cp`, and `pwd` along with the main `git` command: `git pull origin main`.

1.1 `cd`

`cd` means change directory. There are several forms we could use:

- `cd 345_lab_git`
  - `cd` followed by the name of a folder changes the directory into the folder
- `cd`
  - `cd` by itself takes you to your `home` folder
    - since your username is `pi`, your home folder is `/home/pi`
- `cd ..`
  - `..` means one level up, so this command takes you up one folder in the tree
  - if you were in `/home/pi/folder1/subfolder1`, this command would take you "up" to `/home/pi/folder1`
- `cd ~/345_lab_git`
  - '~' is a short-cut for your home folder, so this command would take you to `/home/pi/345_lab_git`
    - `cd 345_lab_git` only works correctly if you are already in your `home` folder
    - `cd ~/345_lab_git` would work from anywhere

1.2 `ls`

`ls` means list the contents of the current folder. There are many optional flags and one optional argument.

Here are some different we could use `ls`:

- `ls`
  - by itself, `ls` prints our the names of all the visible files and folders in the current directory
- `ls -a`
  - show all of the contents of the current folder, including hidden items
    - in Linux, any folder or filename that starts with a period `.` is hidden
      - `.git` is a hidden folder in all git repos
- `ls *.c`
  - show all `.c` files in the current folder
  - `*` is the wild card character that can match any number of characters

        - * `*` can also match zero characters
- `ls -alh`
    - list the contents of the current folder showing *all* files and folders in a *long*, *human-readable* format
    - `-alh` is the most common flag I use
- `ls -alh *.c`
    - show all `.c` files in a long, human-readable format
    - this is how you check the modification or creation time stamp for all `.c` files

1.3 `cp`

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1.4 `pwd`

- `pwd` means print working directory
    - tell me where I am in the file structure
    - what folder am I currently in?

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