

| action | command |
|--|---|
| know the current directory path | pwd |
| know contents of the current dir | ls |
| make new directory | mkdir <name> (short form of make - directory) |
| change to a directory | cd <path to that directory> (short for change directory) |
| go to the parent directory | cd .. |
| make new file | <ol style="list-style-type: none"> vi <filename> edit: press 'i' for insert start writing save and close: hit Ctrl + c, type ":wq", hit enter don't save and close: hit Ctrl + c, type ":q!", hit enter nano <filename> and follow the prompt |
| open an existing file to make changes in it | ditto as above :) |
| take a peek in the file (no changes can be made) | cat <filename> (short for concatenate) |
| copy file | cp <oldname/ path to thing you are trying to copy> <newname/path to place you want it to be copied to> (short for copy) |
| rename file /directory | mv <oldname/path to thing you want to move> <newname/path to place you want it to be moved to> (short for move) |
| delete file | cd <path to the parent directory/file> rm <name> (short for remove) |
| delete directory | rm -r <name> (the -r is for recursive removal) |

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| compile a C file | gcc <c filename> -o <compiled filename> |
| run compiled file | ./<compiled filename> |

Mac users: **PLEASE READ**

1. when the instructions say hit “ctrl +C”, **use the ctrl key, not the command key**
2. There is no PuTTY for Mac. **Just open the terminal** and you are good to type all these commands!
3. To ssh to snowball, you will open the terminal and type
`<your_gsu_id>@snowball.cs.gsu.edu` and hit enter. Enter your password when prompted.

Important to know for this lab:

- Troubleshooting ssh
 - Make sure your username (the thing that comes before ‘@student.gsu.edu’ in your student email)
 - Make sure your password is correct (this is the same password that allows you to login to iCollege)
- Troubleshooting creating directories and files:
 - **Do not name any files or directories with spaces in between for this lab.**
 - make sure the spellings of the commands are correct. For example, “mkdir” is not “makedir” :)
- Troubleshooting running C files
 - A compiler is a program that interprets a C file. gcc is the name of a C compiler.
 - the command “gcc <filename>” asks the gcc compiler to interpret your C code into what a computer can understand, namely binary file.
 - Hence, running “gcc <filename>” creates a new binary file named “a.out” for your C code.
 - If you want this binary file not to be called “a.out”, then you will have to use “gcc <filename> -o <compiled filename>”
 - Since your computer understands only binary, you will run this binary file as either “./a.out” or “./<compiled filename>” and you will get the output of your C file.
- Troubleshooting running python files:
 - To run python file, you will need to use command “python <filename/path to file and filename>”
 - Python is an interpreted language, so it is not going to give you binary file in return like C did, but directly run. So, “python <file>” is equivalent to two C commands, “gcc <file>; ./a.out”