

**Lab 2**

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**100 Points**

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**Introduction**

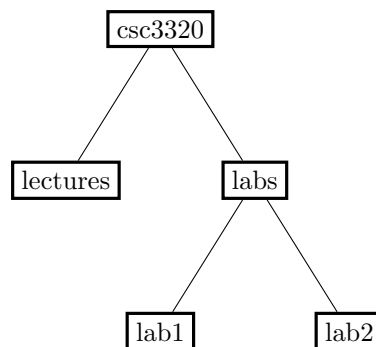
Welcome to the second programming lab of **CSC 3320: System-Level Programming!** Today we will be covering the following topics:

1. Practices on the basic utilities for managing files and directories in a terminal of UNIX-like systems.
2. Understanding relative and absolute paths.

**Instructions:**

- Attendance is mandatory.
- Labs must be completed individually.
- If you have any questions, please do not hesitate to ask TA.
- Name your file in the format as suggested in the deliverable section.
- Lab assignments are due by 5:00 PM the day after your lab session. For example, if your lab is on Thursday, your deadline will be Friday at 5:00 PM. Similarly, if your lab session is on Tuesday, your deadline will be Wednesday at 5:00 PM, and so on.

1. (20 points) Within your home directory, create this directory tree using `cd` and `mkdir` commands:



2. You are provided a file, named **fruit.txt**. Please write the commands you will issue to complete the following tasks step by step.
  - (a) (5 points) Store the fruit file to your **lab2** directory using **sftp**.
  - (b) (5 points) After logging in to **snowball**, change your directory to **lab2** using relative address.
  - (c) (5 points) Use **cat** command to display the contents of the file.
  - (d) (7 points) Copy the file to **lectures** directory and name it as **myfruit.txt** using the relative path.
  - (e) (7 points) Go to your **lectures** directory using relative path. Use **ls** command to show that the newly copied and renamed file **myfruit.tx** exists.

- (f) (5 points) Change your directory to **lab2** using absolute path.
- (g) (7 points) Use **cp** command to move everything (recursively) of **lectures** directory under **lab2** directory.
- (h) (7 points) Issue a **pwd** and **ls** commands inside **lectures** directory (in its new location) and show **myfruits.txt** exists in the correct path.
- (i) (7 points) Use **ls** command with appropriate flag to show the file permissions of the **myfruit.txt**.
- (j) (10 points) Change the file's permissions using a single command, so that user/owner can have **rw**x, groups and others can have **--x** permissions.
- (k) (5 points) Remove **lectures** directory recursively (i.e, including everything within it).
- (l) (10 points) Use **history** and other commands to store your latest 50 commands into a text file, called **lastname\_firstname\_Latest50.txt**.

### Deliverables

For today's lab, write a report by writing the commands to each question and sub-questions (as appropriate) and attaching the required screenshots (as output of each question/sub-question). Please name your report file as **lastname\_firstname\_lab02.doc (or pdf)**. You will need to submit your report file and the **lastname\_firstname\_Latest50.txt** file to the **Lab 02** dropbox in iCollege.

### Broader Grading Criteria

- You will be evaluated based on the points distribution as shown for each task.
- For this lab, collect your screenshots during each of the tasks you do and place them within the document that you will prepare and submit.

Question:	1	2	Total
Points:	20	80	100
Bonus Points:	0	0	0
Score:			