

# CSC3320 System Level Programming

## Lab Assignment 2 - Part 2 (Out-of-lab)

Instructor: Fil Rondel

Purpose: Practice with the basic utilities for managing files and directories in terminal.

### Notes:

- 📅 Due same day next week by 11:59.
- 📅 Write a report by answering the questions and upload the report (called Lab2\_FirstNameLastName.pdf or Lab2\_FirstNameLastName.doc) to Google Classroom no later than 11:59 pm a week from the day are taking this lab session.

Open your terminal and connect to snowball. Change your directory to your home directory (`cd ~`), and then create a new directory named as "Lab2\_P2" (`mkdir Lab2_P2`). After that, go to directory Lab2\_P2 (`cd Lab2_P2`) and download a test file by the following command (internet access required):

```
cp /home/frondel1/public/RealEstate.csv .
```

Be sure it succeeds using "ls" to see the file name "RealEstate.csv" listed.

Then please **write the commands you will issue to complete the following tasks** step by step. (You cannot use `cd` to change the working directory during the steps except step (9). Each task requires only one command)

(1) You may be curious about what information is stored in this file. So please use `cat` to display the content in "RealEstate.csv" using a relative pathname.

```
cat RealEstate.csv
```

(2) We know that cat is good for showing the content of a small file. But since the file contains many lines, maybe you still cannot find out what information this file stores after step (1). So please use head to list the first three lines in "RealEstate.csv".

```
head -3 RealEstate.csv
```

(3) Use wc to check the number of homes sold out in "RealEstate.csv".

```
wc -clw RealEstate.csv
```

(4) Finish the task in step (3) by using the cat command.

```
cat > RealEstate.csv    <Enter>
```

```
<Ctrl-D>
```

(5) Use mkdir to create a new directory "public" under your own home directory using relative pathname.

```
mkdir public
```

(6) Copy "RealEstate.csv" into your "public" directory and name it as "myRealEstate.csv".

```
cp /home/rshaon1/Lab2_P2/RealEstate.csv /home/rshaon1/public/myRealEstate.csv
```

(7) Display the absolute pathname for the current working directory.

```
pwd
```

(8) Check the existence of "myRealEstate.csv" using ls with an absolute pathname.

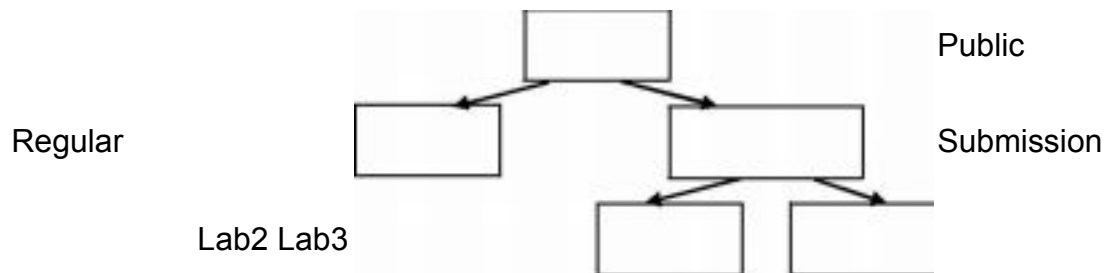
```
ls /home/rshaon1/public
```

(9) Go into your "public" directory using relative pathname.

```
cd public
```

(10) Use mkdir to create a file structure as below in your "Public" directory using relative pathnames.

```
mkdir -p Public/{Regular,Submission/{Lab2,Lab3}}
```



(11) Rename the directory "Regular" as "Others".

```
mv /home/rshaon1/public/Public/Regular /home/rshaon1/public/Public/Others
```

(12) Use cp to copy the directory "Lab2\_P2" from your home directory to "Lab2" using the relative pathname.

```
cp -r ~/Lab2_P2 ~/public/Public/Submission/Lab2
```

(13) Remove the directory "Lab2\_P2" which is located at your home directory.

```
rm -r /home/rshaon1/Lab2_P2
```

(14) Use history to list the commands you previously typed.

```
history
```

(15) Store the last 50 commands you typed neatly into a file "Lab2\_2.txt", one command per line and submit it in Google Classroom.

```
history 50 > /home/rshaon1/public/Public/Submission/Lab2/Lab2_P2/Lab2_2.txt
```

(Look at screenshot below)

```
Terminal Shell Edit View Window Help
rafidshaon - rshaon1@gsuad.gsu.edu@snowball:~/public/Public/Submission/Lab2/Lab2_P2 - ssh rshaon1@snowball.cs.gsu.edu - 204x63
[rahaon1@gsuad.gsu.edu@snowball Submission]$ cd Lab2
[rahaon1@gsuad.gsu.edu@snowball Lab2]$ ls
Lab2_P2
[rahaon1@gsuad.gsu.edu@snowball Lab2]$ cd Lab2_P2
[rahaon1@gsuad.gsu.edu@snowball Lab2_P2]$ ls
Lab2_2.txt RealEstate.csv
[rahaon1@gsuad.gsu.edu@snowball Lab2_P2]$ cat Lab2_2.txt
141 cp -i home/rshaon1/Lab_P2/RealEstate.csv home/rshaon1/Public/MyRealEstate.csv
142 cd Lab_P2
143 cp -i home/rshaon1/Lab2_P2/RealEstate.csv home/rshaon1/Public/MyRealEstate.csv
144 cd Lab2_P2
145 ls
146 pwd
147 cd /home/rshaon1
148 cp RealEstate.csv /home/rshaon1/Public/MyRealEstate.csv
149 cp RealEstate.csv /home/rshaon1/Public/MyRealEstate.csv
150 cp RealEstate.csv /home/rshaon1/Public/myRealEstate.csv
151 ls
152 cp -i RealEstate.csv Public/myRealEstate.csv
153 cp /home/rshaon1/Lab2_P2/RealEstate.csv /home/rshaon1/Public/myRealEstate.csv
154 ls
155 pwd
156 ls
157 ls /Public
158 ls /home/rshaon1/Public
159 ls Public
160 cd Public
161 mkdir -p Public/{Regular,Submission/{Lab2,Lab3}}
162 tree Public
163 mv Regular Others
164 ls
165 mv Regular Others
166 mv /Public/Regular Others
167 mv /home/rshaon1/Public/Public/Regular /home/rshaon1/Public/Public/Others
168 cd Public
169 ls
170 tree Public
171 cp Lab2_P2 Lab2
172 cd Public
173 cd /home/rshaon1/Public
174 ls
175 cp /Lab2_P2 /Public/Submission/Lab2
176 cp ~/Lab2_P2 ~/Public/Submission/Lab2
177 cp -r ~/Lab2_P2 ~Public/Submission/Lab2
178 cp -r ~/Lab2_P2 ~/Public/Submission/Lab2
179 cp -r ~/Lab2_P2 ~/Submission/Lab2
180 cp -r ~/Lab2_P2 ~/Submission/Lab2
181 cp -r /home/rshaon1/Lab2_P2 ~/Public/Submission/Lab2
182 cp -r /home/rshaon1/Lab_P2 ~/Submission/Lab2
183 cp -r /home/rshaon1/Lab2_P2 ~/Submission/Lab2
184 cp -r ~/Lab2_P2 ~/Public/Public/Submission/Lab2
185 rm /home/rshaon1/Lab2_P2
186 rmdir /home/rshaon1/Lab2_P2
187 rm -r /home/rshaon1/Lab2_P2
188 ls
189 history
190 history 58 > /home/rshaon1/Public/Public/Submission/Lab2/Lab2_P2/Lab2_2.txt
[rahaon1@gsuad.gsu.edu@snowball Lab2_P2]$
```