Lab 1: Basic Unix Commands

Question 1: (For each question below, you need to capture the screenshots along with the commands).

Suppose, you are in your home directory.

a) What will the following command print? **(1 point)**
cd ../../

b) What command will bring you back to your home directory? **(1 point)**

c) Under your home directory, create a directory named **CSCD240**. **(1 point)**

d) You want to access the directory named **CSCD240** from your home directory. Write down both the **absolute path** and **relative path** for that. **(2 points)**

e) After running the command in **d**, what command will you use to figure out your current working directory? **(1 point)**

f) Create a file named **Assignment1** under **CSCD240**. **(1 point)**

g) Create a hard link for the file named **Assignment1** in your current directory. You can choose any name. **(1 point)**

h) Suppose you are now in **CSCD240** directory. What output will be produced by the following command? Explain.
'ls ~ .' **(1 point)**

i) You need to copy **Assignment1** file from your current directory (**CSCD240**) to your home directory. What command will you use? **(1 point)**

j) Create one directory named **Assignment** under **CSCD240**. Move the file named **Assignment1** from current directory (**CSCD240**) to **Assignment** directory. What commands will you use?
(2 points)

k) Copy the **Assignment** directory from the current directory (CSCD240) to your home directory. What command will you use?
(1 point)

l) What is the difference between '**ls –l**' and '**ls –al**' commands? **(1 point)**

m) Make a new command **dir** that is equivalent to Unix command **ls –al**. Capture the screenshot of the command that can achieve that and the results. **(1 point)**

n) We'd like to get a warning or prompt information before we delete the subdirectory **Assignment** under **CSCD240**. What command will you use? **(1 point)**

o) Use **rmdir** to delete subdirectory **Assignment** under **CSCD240**. Does it delete the directory? Why or why not? **(1 point)**

Question 2. Suppose you are in your home directory.

a) Create a text file named **calendar2020.txt** using command **cal 2020 > calendar2020.txt**. Issue the **more** command or the **less** command on **calendar2020.txt** and capture the

screenshot of the output. How to move to the beginning of **calendar2020.txt** in **less**? How to move to the end of **calendar2020.txt** in **less**? How to scroll down or up? **(5 points, one for each question)**

b) Remove **read permission** from **calendar2020.txt** for the owner and **all permissions** for the group. Write down the commands using both symbolic and numeric (octal) values. Capture the screenshot for the commands and prove that the permission was changed. (4 points ; 2 points for each command)

Question 3. Explain the following outputs from a unix command: **(4 points, one for each)**

-rw-r--r-- 1 syasmin IT-GenericLinuxGroup 3637 Sep 21 2015 file.txt

drwx------ 16 syasmin IT-GenericLinuxGroup 4096 Mar 29 2016 CSCD240

lrwxrwxrwx 1 syasmin IT-GenericLinuxGroup 15 Nov 21 2015 netstorage -> /mnt/ns-syasmin

-rw-r--r-- 2 syasmin IT-GenericLinuxGroup 80 Jan 24 2017 hello.c

Submission:

- Submit the assignment by creating a PDF file. Name this file as follows: your last name, first letter of your first name; Lab1.pdf (i.e., **YasminSLab1.pdf**). This file will contain all your answers. Each question should be copied first and then answered.
- Please note that some questions have more than one part. Please note that for those questions, points have been assigned separately for each part. You'll miss points if you don't answer all parts.
- You should turn in the assignment through EWU Canvas system.
- You need to follow the assignment specification properly. You'll lose points if you fail to meet the assignment specifications.
- **Submission deadline is Friday, October 2, 2020 11: 59 pm.**
- **No late submission will be accepted.**