

LAB 1: LINUX INTRO

CSCE1030

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Notes

- The lab is due today by 11.59pm
1. WORK BY YOURSELF: This lab instructions are available on Canvas. If you feel comfortable with this assignment, you can do it by yourself. If you wish, ask me to check it in the very end before you submit it.
 2. WORK WITH ME: Follow the steps I describe on the slides.

Software

- 1. Accessing the remote computer (CSE machines) and running code:
 - *Window*: [PuTTY](#)
 - *MacOS*: [Terminal](#)
- 2. Transferring files between remote computer and your computer:
 - *Windows*: [WinSCP](#)
 - *MacOS*: [Terminal \(or Filezilla\)](#)

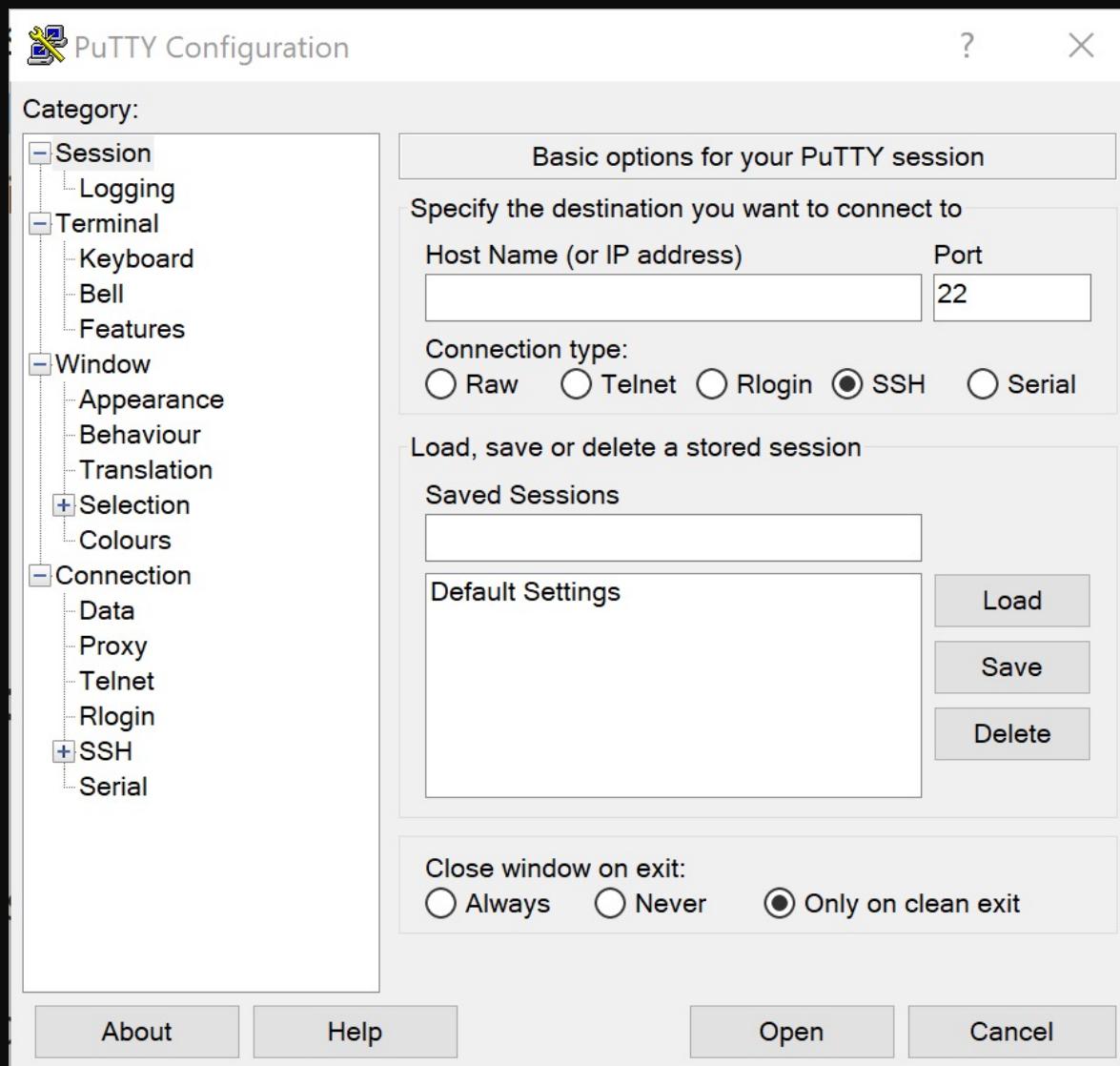
What Do You Need to Submit?

Three files:

1. musings
2. sortedIntegers
3. typescript

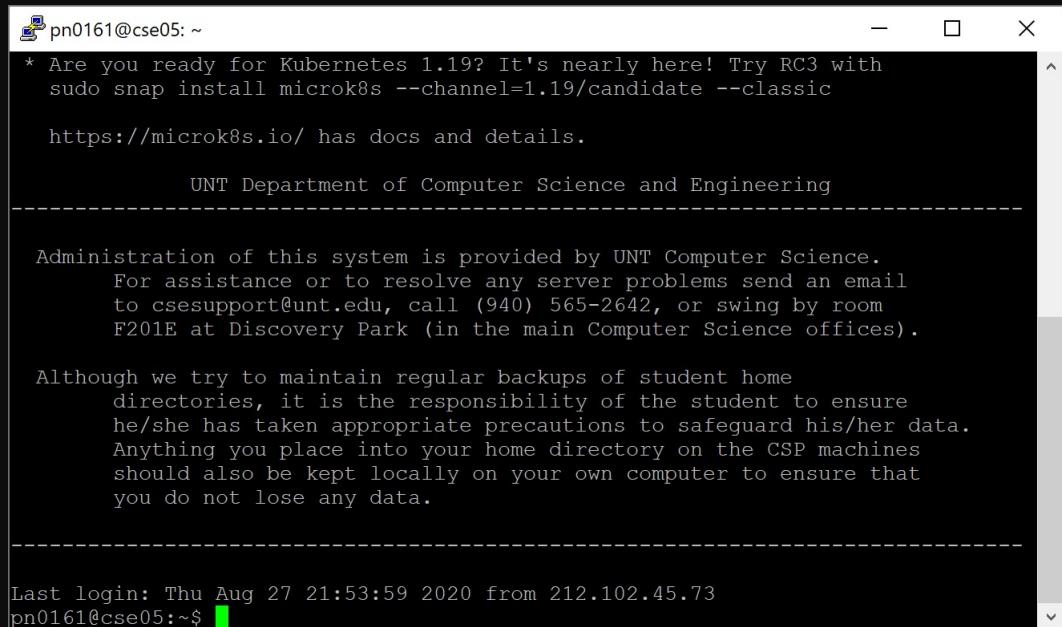
Step 1: Accessing computer remotely

1. **Use PuTTY** to perform operations (“to give instructions what to do”) on a remote computer. We will need it in the beginning of the class and throughout.
 - Click on PuTTY;
 - For *Host Name* type one of the followings:
 - cse01.cse.unt.edu
 - cse02.cse.unt.edu
 - cse03.cse.unt.edu
 - cse04.cse.unt.edu
 - cse05.cse.unt.edu
 - cse06.cse.unt.edu
 - Type in your EUID as login and your password



Step 2: Explore Linux!

1. Where am I?
Type: **pwd**
(print working directory)
2. What do I have here? Type: **ls**
(list files and directories)
3. How do I go to a different folder(directory)?
Type: **cd** (+path to directory)



```
pn0161@cse05: ~
* Are you ready for Kubernetes 1.19? It's nearly here! Try RC3 with
  sudo snap install microk8s --channel=1.19/candidate --classic

  https://microk8s.io/ has docs and details.

  UNT Department of Computer Science and Engineering

Administration of this system is provided by UNT Computer Science.
For assistance or to resolve any server problems send an email
to csesupport@unt.edu, call (940) 565-2642, or swing by room
F201E at Discovery Park (in the main Computer Science offices).

Although we try to maintain regular backups of student home
directories, it is the responsibility of the student to ensure
he/she has taken appropriate precautions to safeguard his/her data.
Anything you place into your home directory on the CSP machines
should also be kept locally on your own computer to ensure that
you do not lose any data.

Last login: Thu Aug 27 21:53:59 2020 from 212.102.45.73
pn0161@cse05:~$
```

Step 3: Try to create and to modify files

- Type **nano**
- Create a file (CTRL+O)
- Save a file with saving it or not (CTRL+X)
- Crate and Modify a file: **cat >> list1**
(to exit from typing mode (CTRL+D))
- Sort a file: **sort <list1 >sortedList1**
ls
more sortedList1
- **sort -g <integers >sortedList1**

Step 3: Compiling & Running C++ code

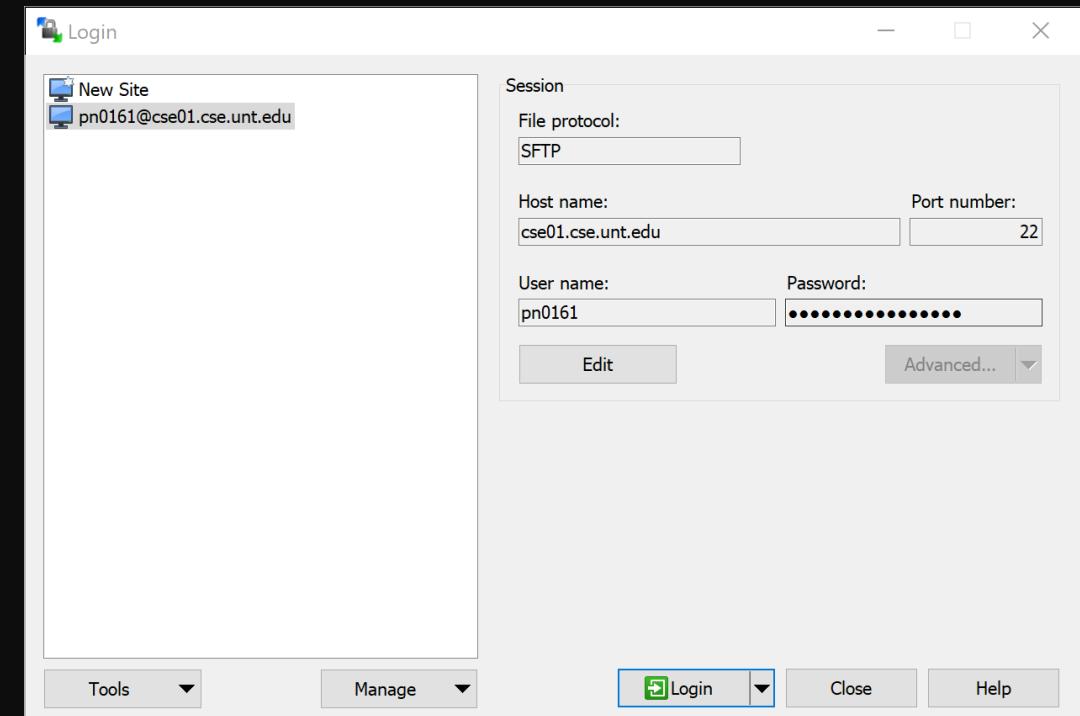
- `cd`
- `cd Lab01`
`ls`
- `cd programs`
`g++ 01-08.cpp`
will give us an executable file a.out
- `ls -lt`
`./a.out`
`pm a.out`

Step 4: Searching for patterns (typescript)

- cd
- cd Lab01
- cd programs
- script
- grep number *.cpp
- grep Number *.cpp
- exit

Last Step: Getting the Files to Submit

1. Open **WinSCP**
2. Use the same host name you used in Putty



Last Step: Getting the Files to Submit

1. Open **WinSCP**
2. Use the same host name you used in Putty
3. Copy files *musings*, *sortedIntegers*, *typescript* on your computer
4. Submit these files on Canvas

