CHAPO FERDINAD

**Project 3**

In this project, we will take a look at Basic Linux commands, explore the power of ssh command and others.

**Pre-requisite:**

* Download rocky8 server (**rocky.project2.com**) from **projects folder** located on **class website to complete this homework**
* Use User account **student** with password: **school1** to login
* Also, all users include root have school1 as password

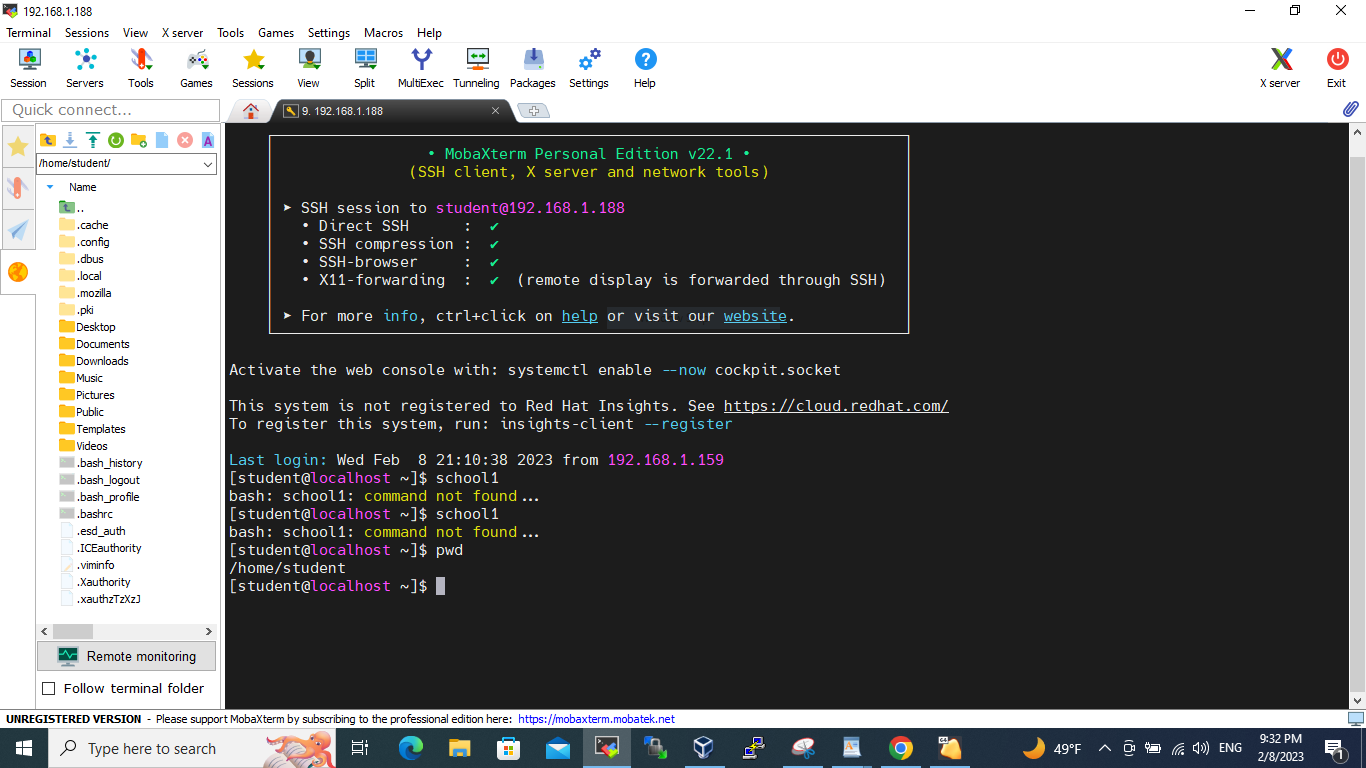
**Instruction**:

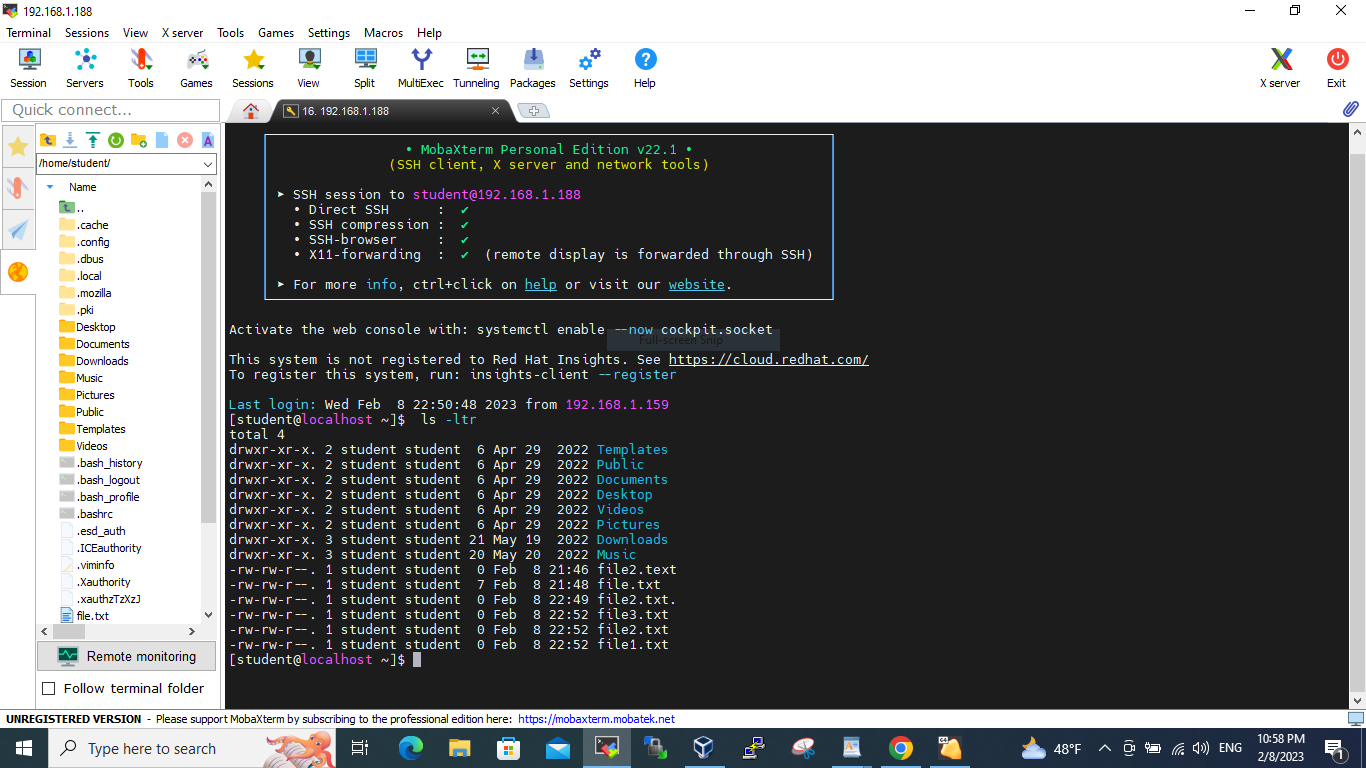
Download **rocky.project2.com** server, Import it on Your VirtualBox and Bridge Network Adapter.

# Note: If you have done this on previous assignment. No need to importing again

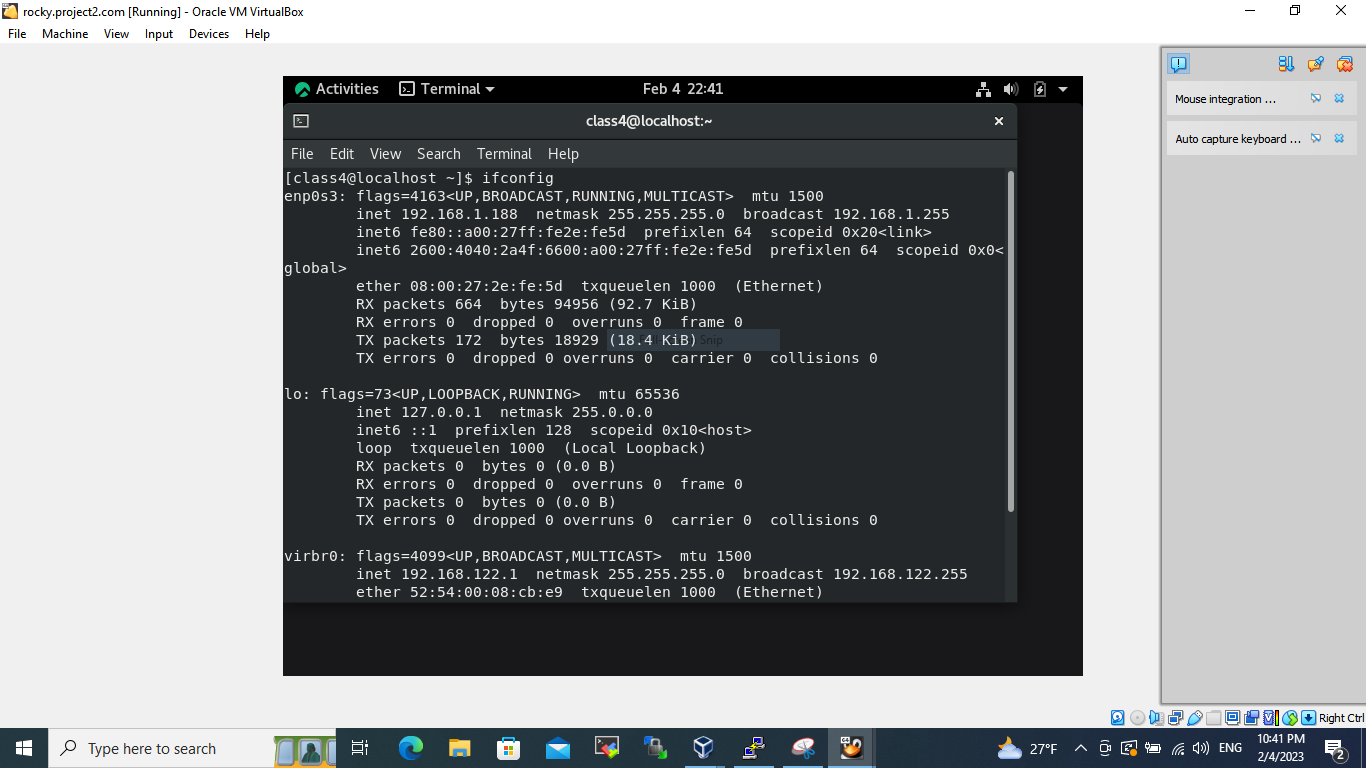
**Tasks 1:**

1-Login as student user



2- Create 3 new files (file1.txt; fil2.txt; file3.txt) in student home directory

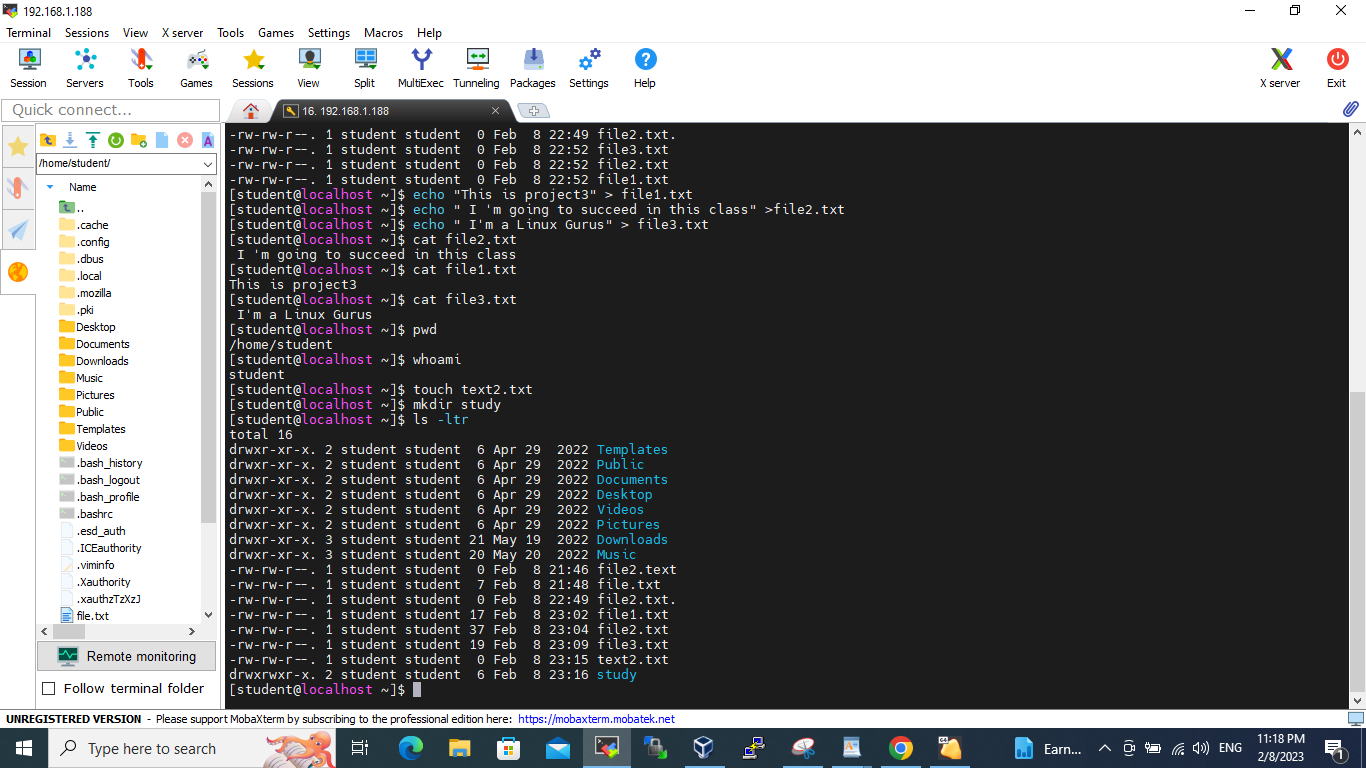
3-Enter below contents to each of those files

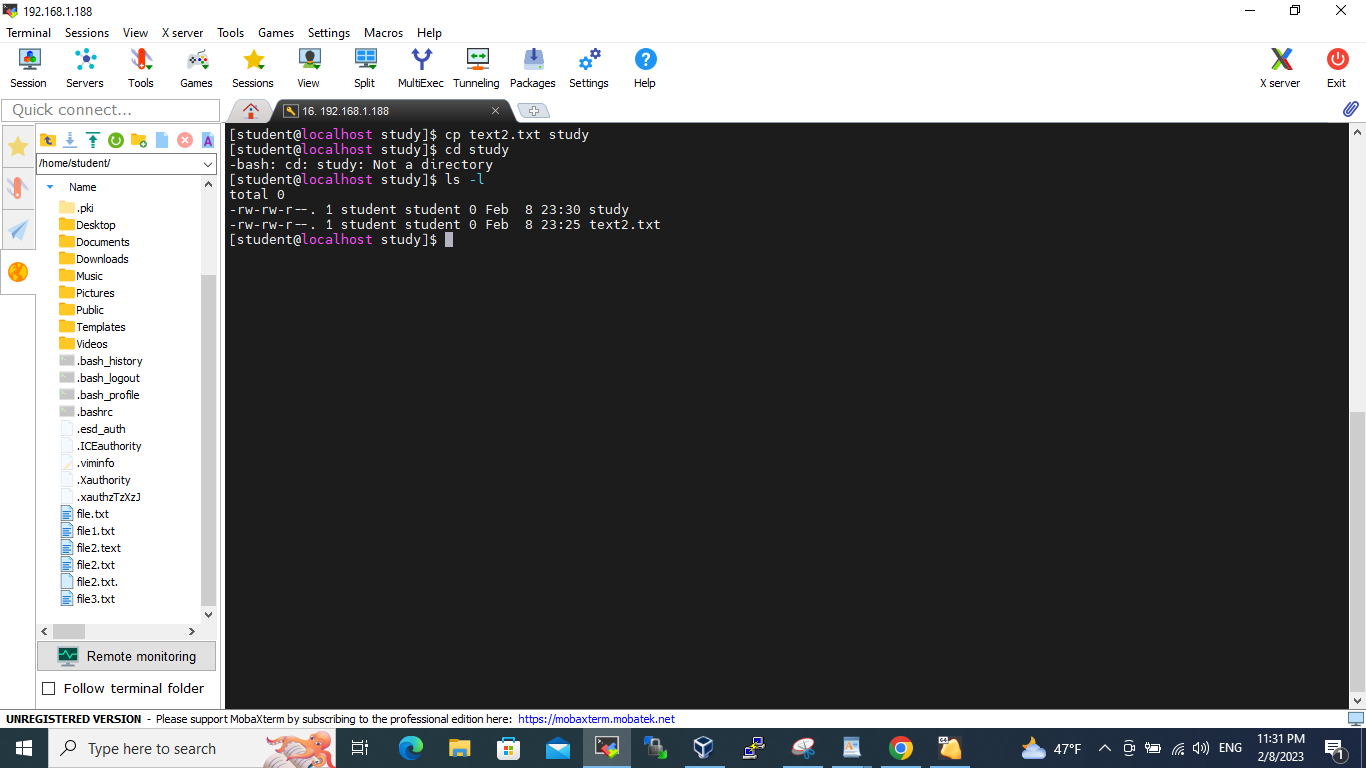
#echo “This is project3” > file1.txt

#echo “I’m going to succeed in this class” > file2.txt

#echo “I’m a Linux Guru” > file3.txt

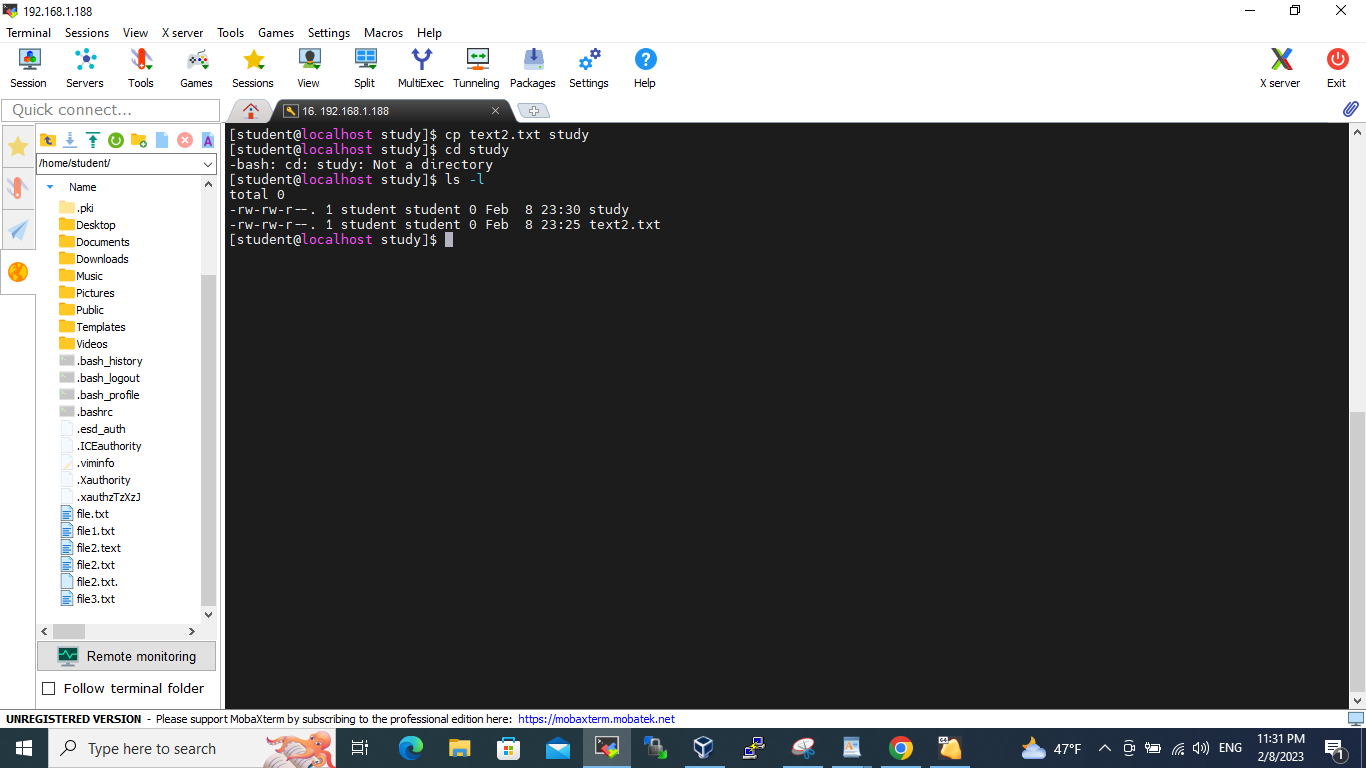
4- Create study directory and text2.txt file



5-Copy a file text2.txt in study directory and preserve the file ownership and time of creation

6-Create another directory called class/today/yourname in your present working directory in one-time command run.

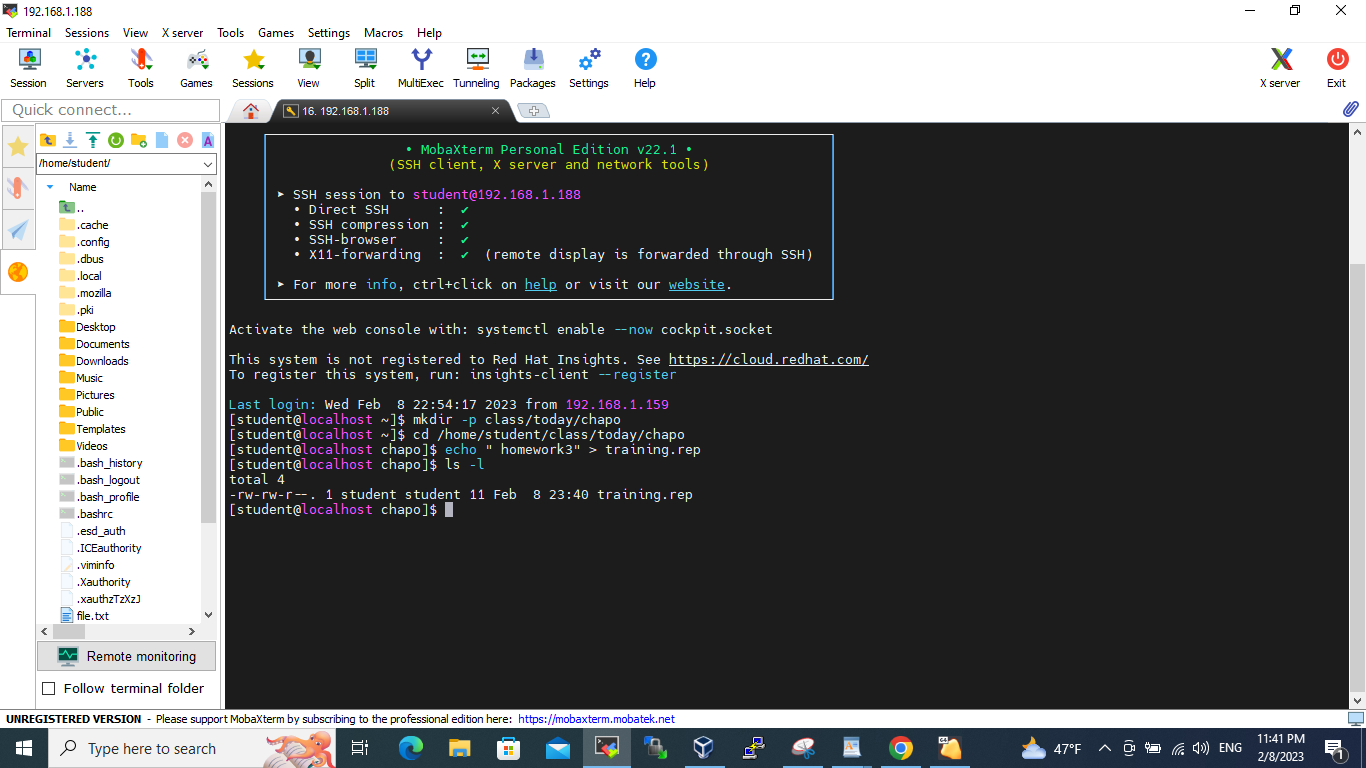
Note: yourname: mean you your name



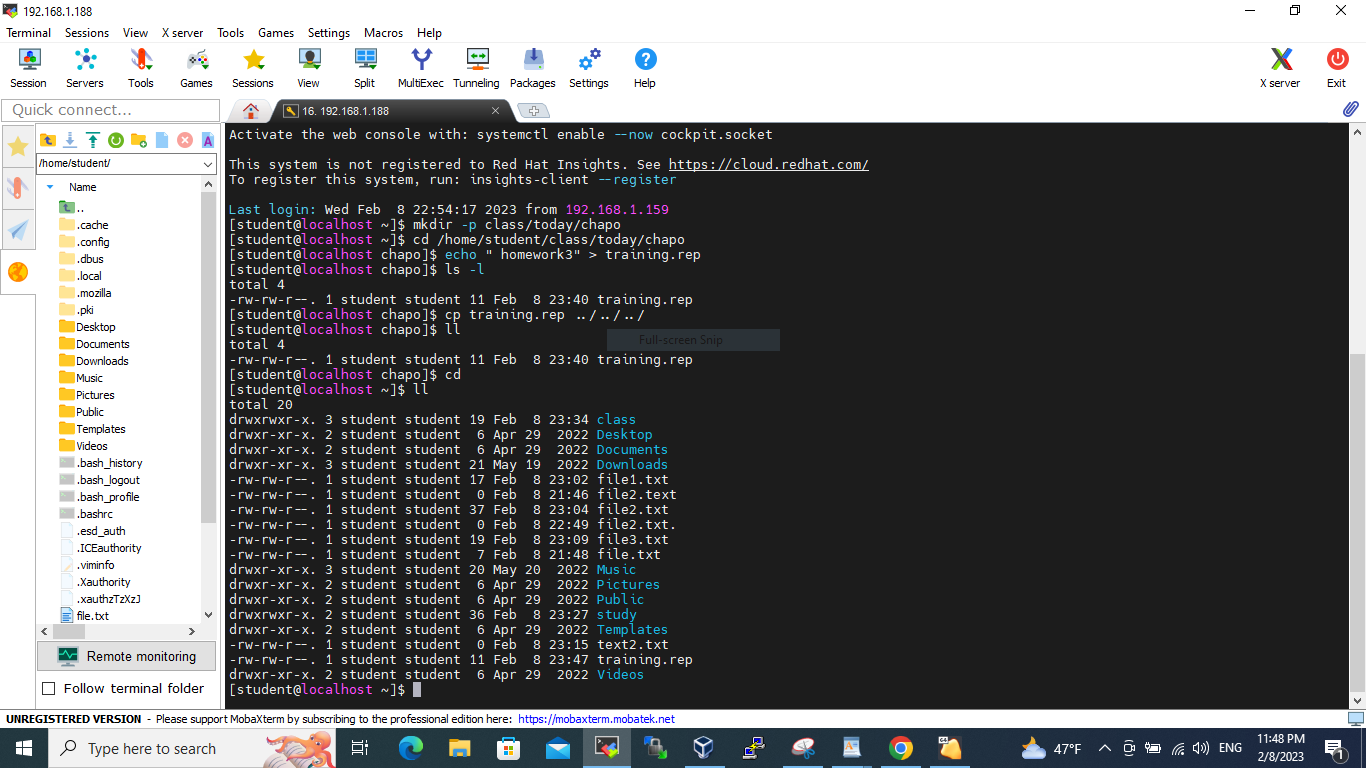
7-Create a file called training.rep inside class/today/yourname and enter the word ‘**homework3’** inside of that file

Copy training.rep to your home directory using relative and absolute path

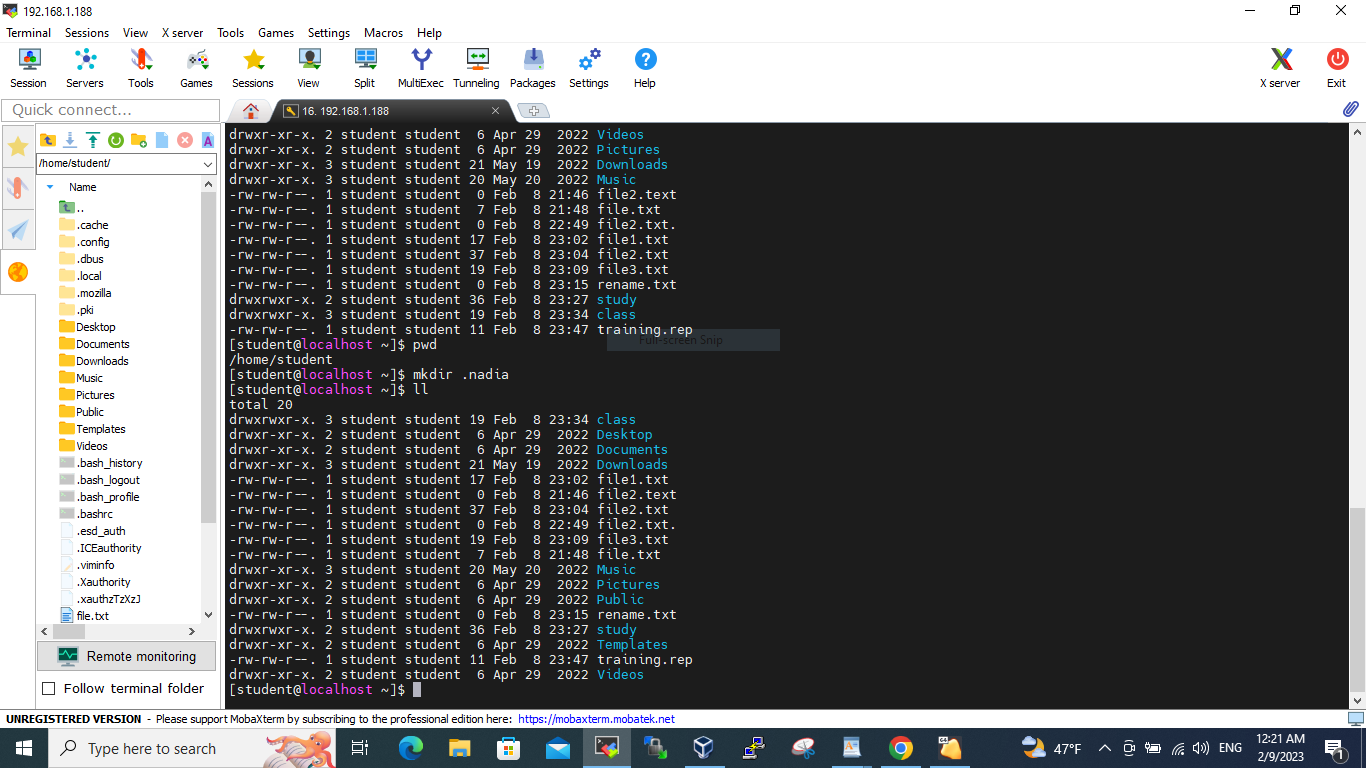
If want to use absolute path

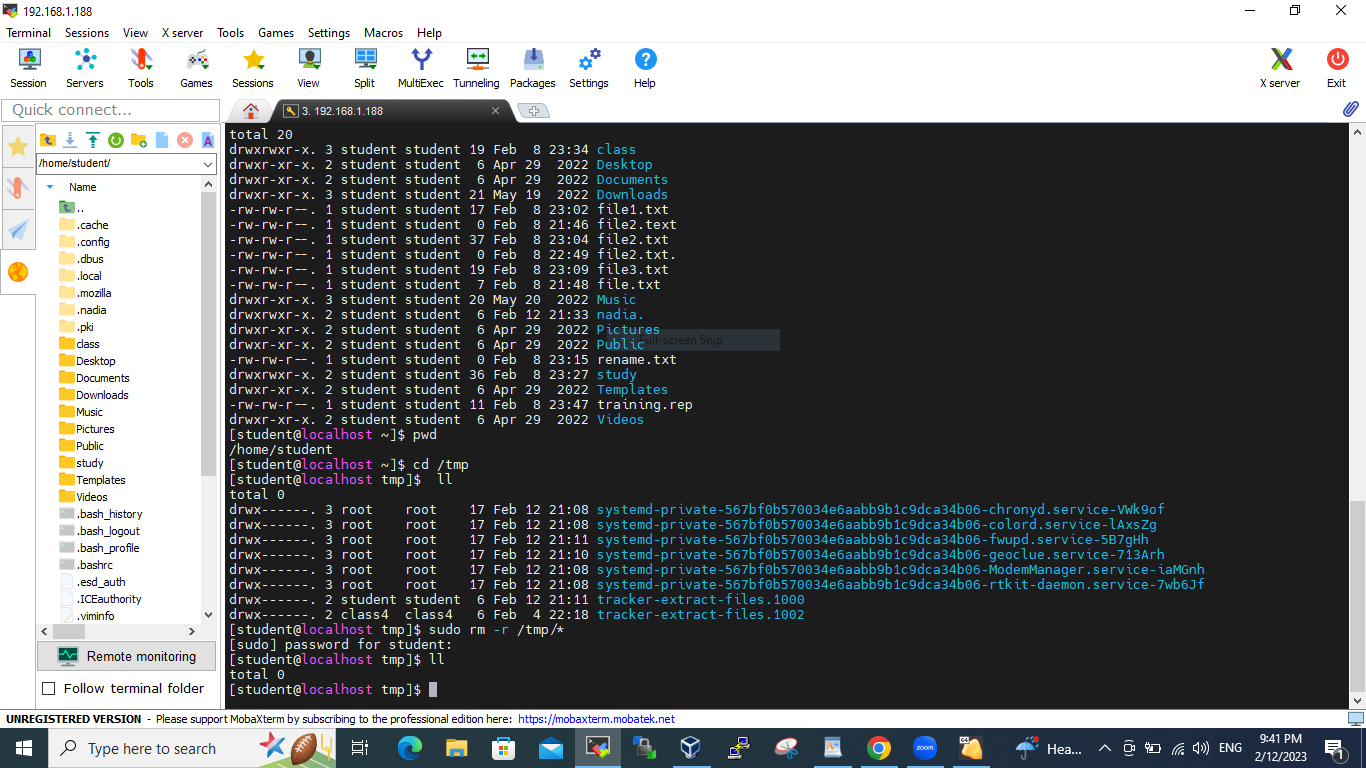
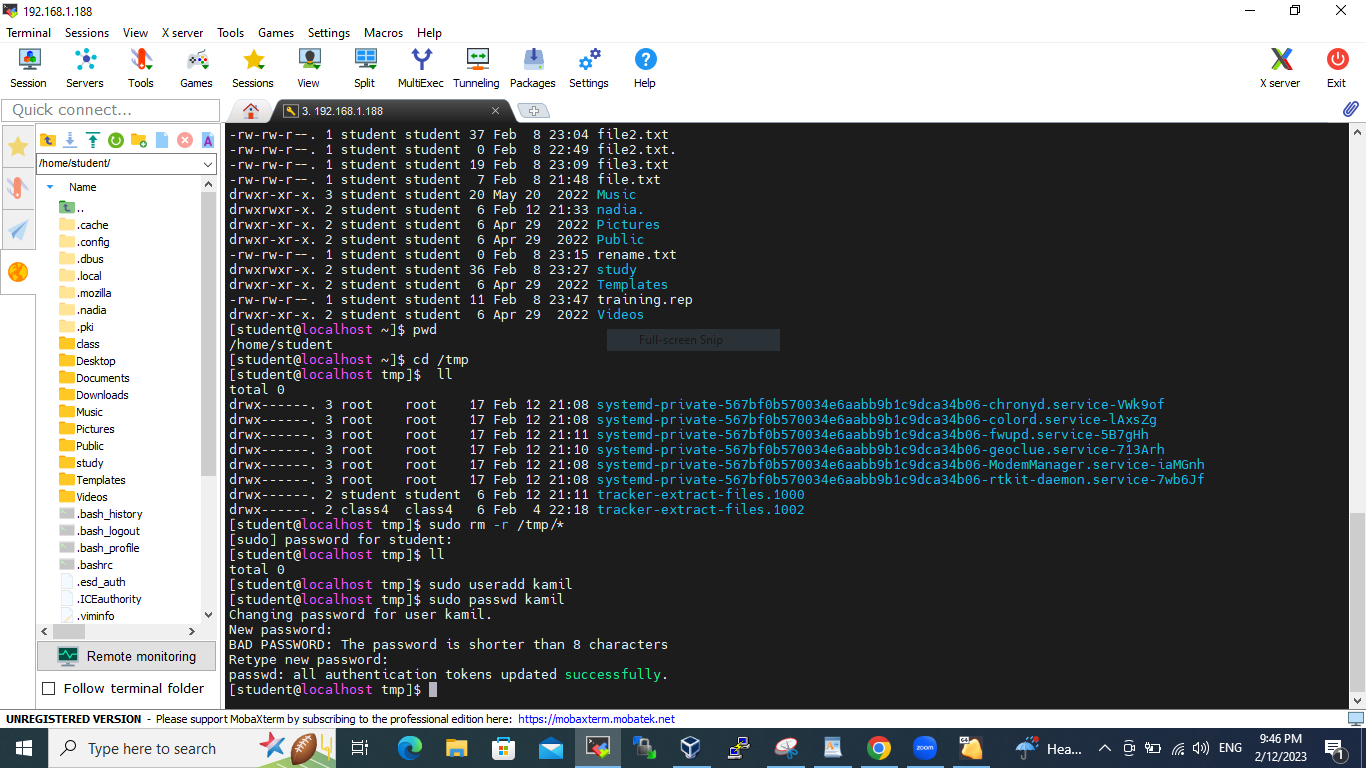
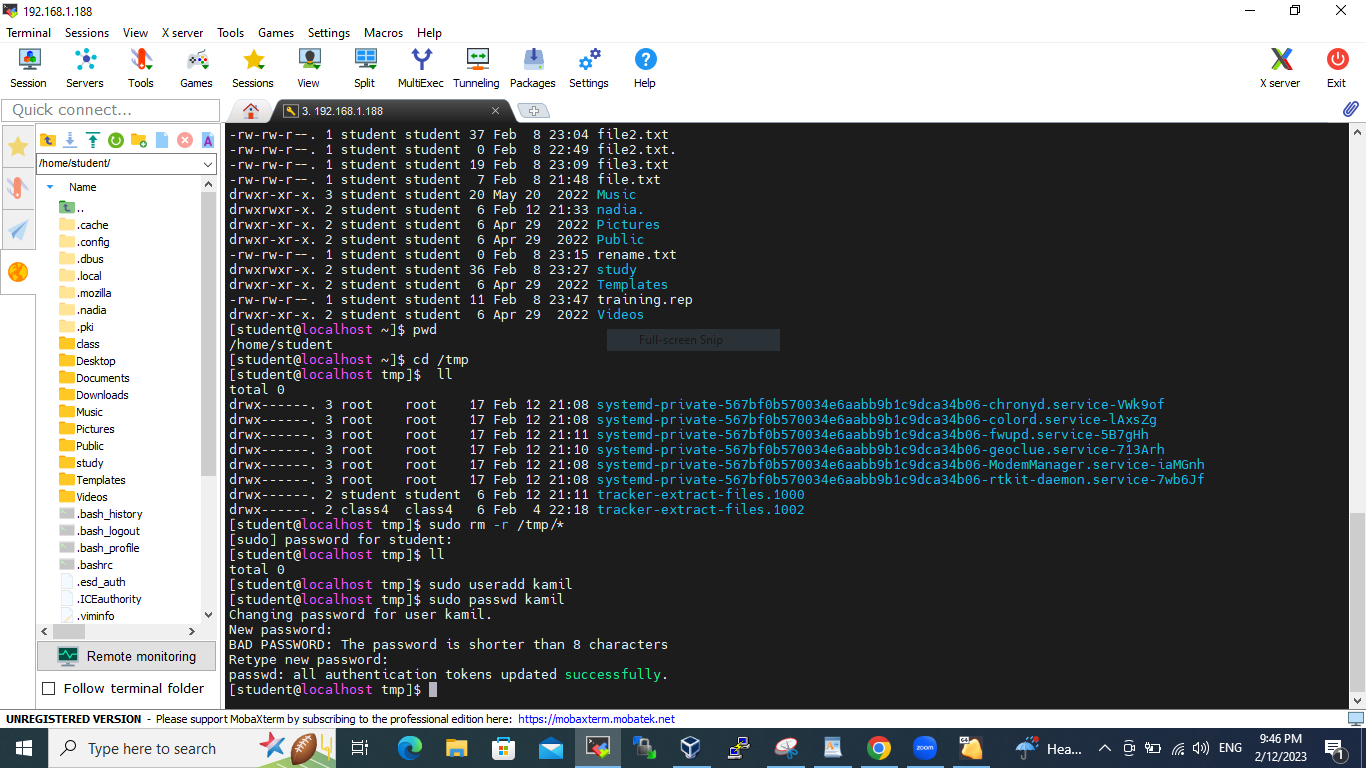
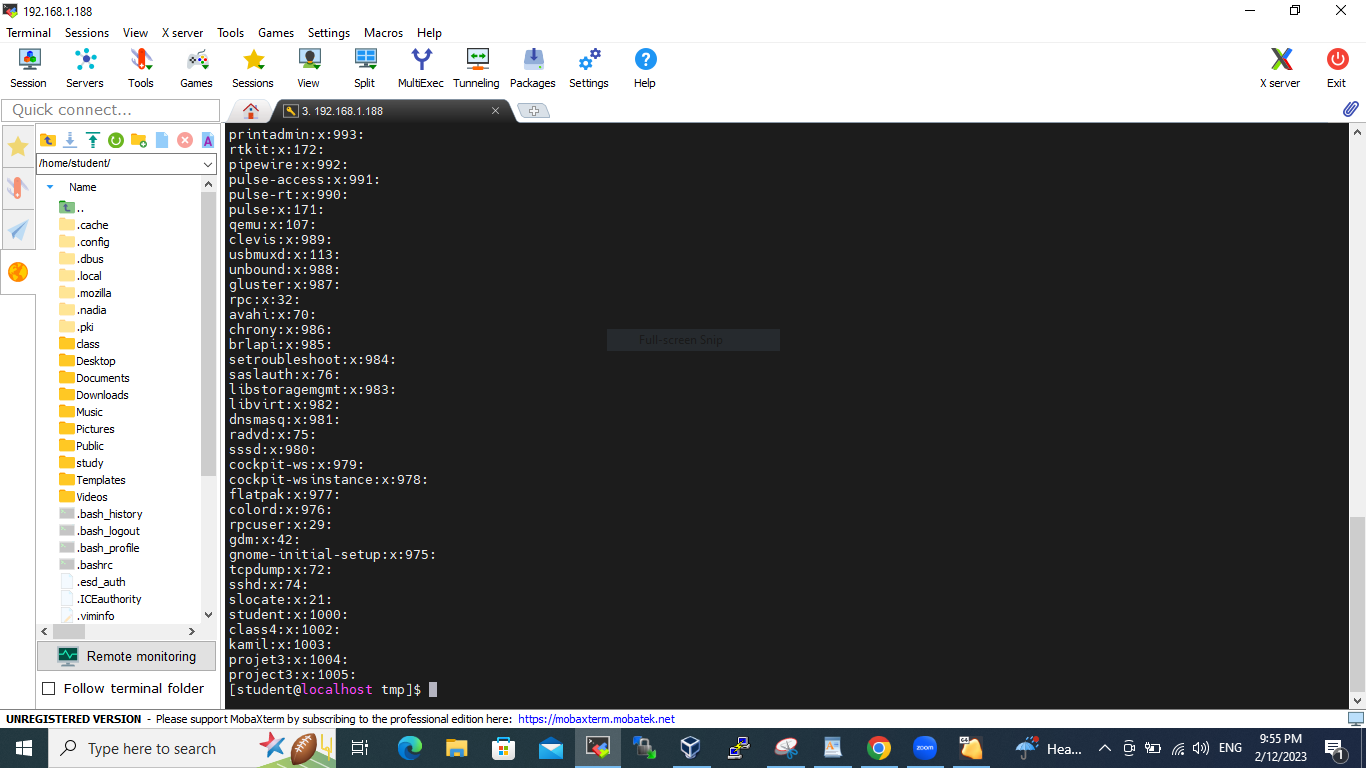


8-Rename text2.txt to rename.txt move rename.txt from its previous location /home/student to /mnt/ directory



9-Create .nadia hidden directory in /home/student



1. Remove all content from /tmp directory with one-time command
2. Create user account kamil and assigned school1 as password
3. Create a group called project3 on your server
4. 
5. Update kamil user account to have project group as secondary group
6. Display first 15 Lines of /var/log/messages file
7. Download nifi-1.16.2-bin.tar.gz file on your student home directory using below link:

[**https://dlcdn.apache.org/nifi/1.16.2/nifi-1.16.2-bin.tar.gz**](https://dlcdn.apache.org/nifi/1.16.2/nifi-1.16.2-bin.tar.gz)

1. After successful download nifi file, move that file from your rocky server to your windows local system.

**Tasks 2**:

1-Build a **redhat8** server with below specs:

* + Name: **rhel.project3.com**
  + RAM: 2048GB
  + Disk: 30GB
  + Account: **student** with password **school1**

2-Define these expressions: Kernel, IP, Default Gateway,

DNS, router, subnet,

3-What is the difference between HUB and Switch?

4-What command would you use to test out connectivity to a remote host, say IP 192.168.1.25

5-From your new **rhel8.project3**.com server, ssh as **student** user to **rocky.project2.com**

6-Login to your r**edhat8** server and perform the following.

* + Display your default shell
  + Compare your **rhel.project3.com** IP address to this IP address: **172.156.42.170**
  + Which class is your **rhel.project3.com** IP address is in?
  + How many hosts IP can you get from your **rhel.project3.com** class?
  + Long list all files and directories in your present working directory.