Andrew Baca
CS480
Assignment #1
January 19th, 2019

PART 1

Purpose:

In this assignment, our task was to install 64-bit OpenSUSE Leap 15.0 Linux onto our vmware virtual machines and establish a connection from the physical computer we are working on to the virtual machine, as well as enable the machine to be accessed from anywhere via the ssh command.

General Steps Taken:

1. I started by using ssh into csvm with X11 forwarding enabled and creating a snapshot of the initial virtual machine titled **before lab 1**. I will also configure the settings on the virtual machine to ask the user if they would like to take a snapshot whenever the machine is powered off.

2. Next, I powered on the virtual machine to firmware and we changed the following settings:
    - set the Supervisor password to: **baca1234**
    - changed the booting sequence to **CD → HDD → Network**
    - checked the date and time, saved the changes, and exited (F10), creating another snapshot titled with the date and time it was taken.

3. I powered the virtual machine on into firmware once again to make sure my settings from (2) were correct, and proceeded to the Linux Installation Page. Once I had reached the first page of the Linux installation, I clicked F4, and made sure DVD was chosen as the source. From here, I chose the installation option on the first page and proceeded to the next steps.

4. I left the keyboard preference as English, and went on to configure the network preferences, entering the following information:
    - Hostname: **andrew**
    - Domain Name: **cs480.cs.nmsu.edu**
    - Network Interfaces: *static IP address:* **192.168.8.12**
    - Netmask: **255.255.255.0**
    - User Interface: **Text Mode**

I also made sure that the DHCP was NOT being used and the Routing/Gateway, Domain Name, and Nameservers were leave empty.

5. For the Partitioning, I went to the start with existing partitions options within the expert partitioner, and entered in the following partitions:
- /dev/sda1 **BIOS Boot Partition** with a size of **8 MiB,** mount left empty
- /dev/sda2 **Linux Swap Swap** with a size of **2 GiB**, mount left empty
- /dev/sda3 **Linux Native BtrFS** with a size of **11.0 GiB**, mounted on **/**
- */dev/*sda4 **Linux Native Ext4** with a size of **rest of the disk (26.99 GiB),**mounted on **/extra**

6. Next, I set the clock to Denver, Mountain time and proceeded to configure NTP, setting the server to **192.168.8.1,** and selected "Run NTP as daemon" as well as "Save NTP Configuration"

7. From here, I created a user for myself, adding in this information:

- Full Name: **Andrew Baca**
- Username: **andrew**
- Password: **NhheePcO**

I made sure NOT to use the same password as administrator and I made sure NOT to have automatic login.

8. Next, I created a **root** password to be **andrew1234**

9. I got to the Installation Settings Page and checked a few settings:

- I first went to Software → details. In there I made sure that autocheck was selected under dependencies. I used the patterns tab, and made sure that no packages under Games, Office Software, Multimedia were selected.
- From there, I went back, and went to Default systemd target: and made sure it was on Text Mode
- Finally, I enabled Firewall and SSH service plus opened the SSH port

Once these settings were good, I proceeded to install, skipping the update messages, which took about 10 minutes in total.

10. After the Installation, I let the machine boot from the internal disk, and once it was booked, I did the following:

- went to etc/hosts and added **192.168.8.1 lbc.cs480.cs.nmsu.edu lbc** to the last line.
- Checked the connection to lbc using **ping lbc** and terminating with Ctrl + C. Note that I saw 0% packet loss.
- Logged into lbc using abaca@lbc
- Logged back on to my virtual machine using andrew@andrew
- Logged out of both and shut down the virtual machine

11. Lastly, I created a snapshot called "**Original Installation**" , powered the machine back onto firmware, and changed to boot setting to boot HDD first, and saved the settings, leaving my VM on.

Passwords:

Supervisor (firmware): **baca1234**
Local User – Username- **andrew**
Password- **NhheePcO**
Username- **root**
Password- **andrew1234**

Notes: I had to Revert to Previous Snapshots 2 times in this assignment. The first time was because of password and username issues, and the second time was for practice, and to get more snapshot intervals between work.

PART 2