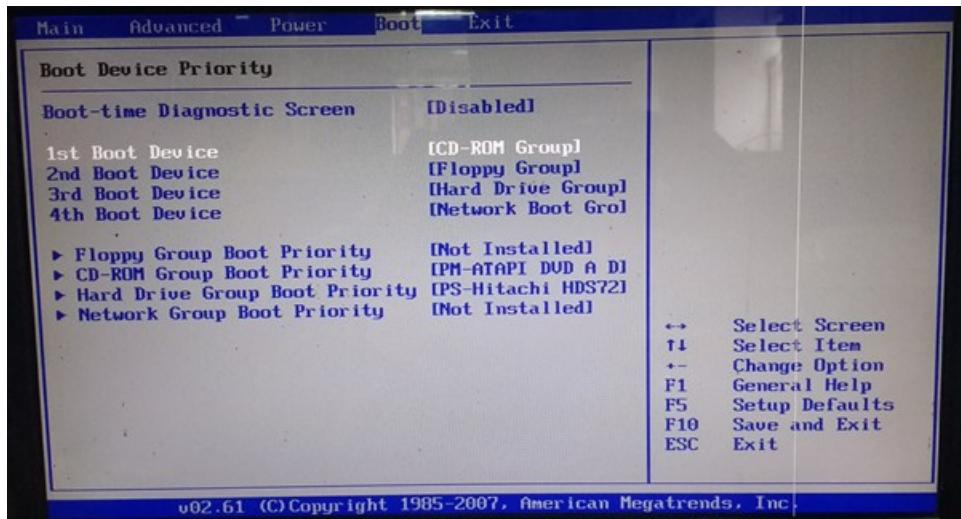


Installation media, check your PC, if it has option of booting from USB device, then you can create a bootable USB or else burn the image on a DVD.

How can you check ? When you start your PC, before the OS loads, you can see some option to enter setup (F10) or something like that. Enter the setup part and see the UI under boot option. See the following image. Check what all options are available against first boot device.



I am using a PC with 2GB RAM and no option to boot from USB Device, so I selected CD-ROM as the first boot device. If you have the USB Device option, then select that.

Take a printout of this document or copy it to your mobile, if it has a PDF Reader.

First of take backup of all your C/C++/Java code/projects and important DOCUMENTS on a separate PEN Drive. Restart the PC and plugin the pen drive and verify if the contents were copied properly or not.

Before you change the boot device option to USB, create a bootable USB.
How to create a bootable USB.

Run the application setup of liveusb-creator-3.12.0-setup by right clicking it and selecting run as administrator. Plugin in your 4GB USB which should be empty Then start the live USB Software, and select the browse button and select the image file named as rhel-server-6.5-x86_64-dvd and select the target device as your PEN Drive and select the Create Live USB Button. It will take time.

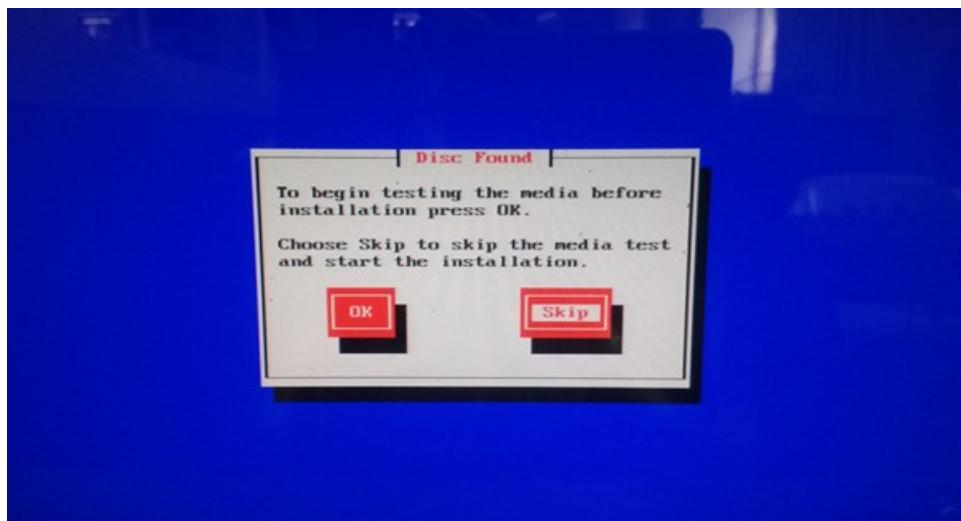
Or

if your PC doesn't support the Boot from USB Option, burn the rhel-server-6.5-x86_64-dvd image to a Good Quality DVD

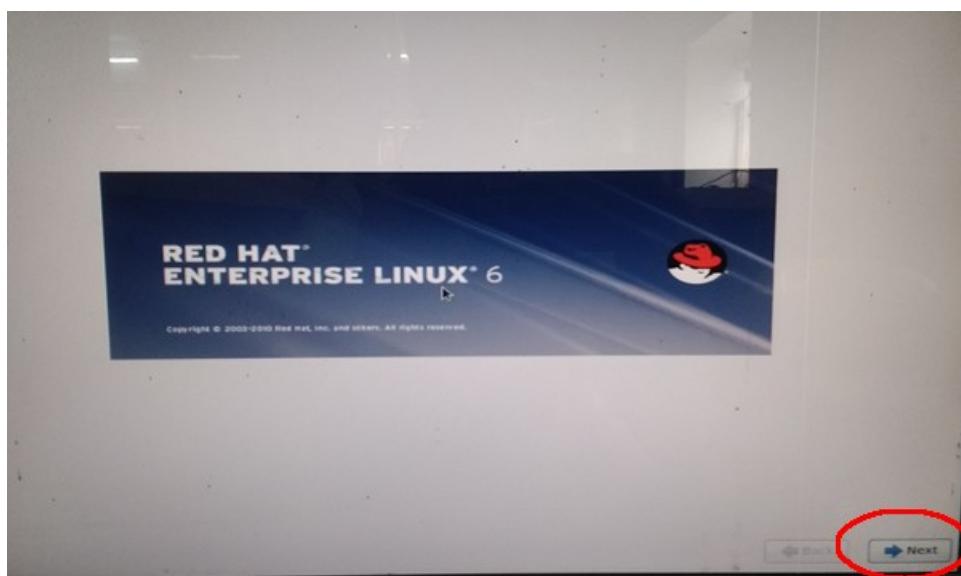
Now restart your PC, enter the setup part and change the boot sequence of the first boot device.

Start your PC with USB attached /DVD inserted (depending on the option you selected as first boot device).

When you see the following UI, select Skip



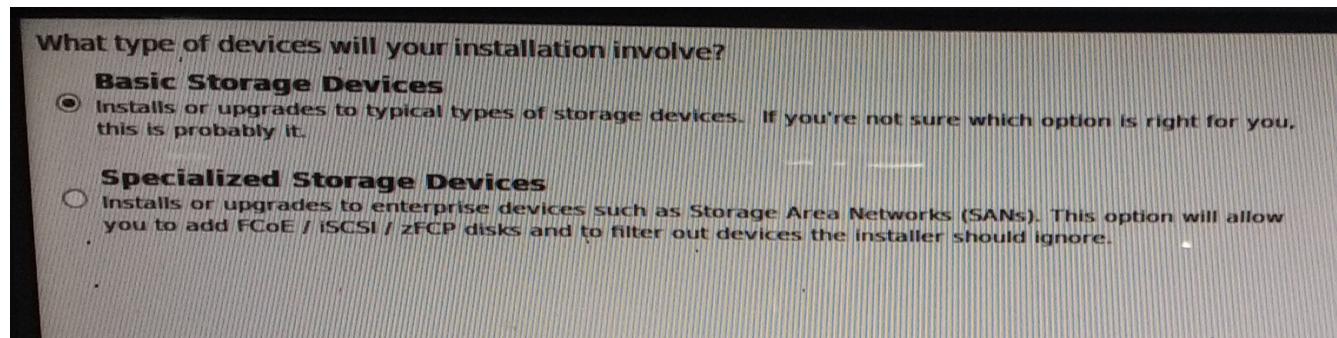
The next UI is as follows, Select Next Button



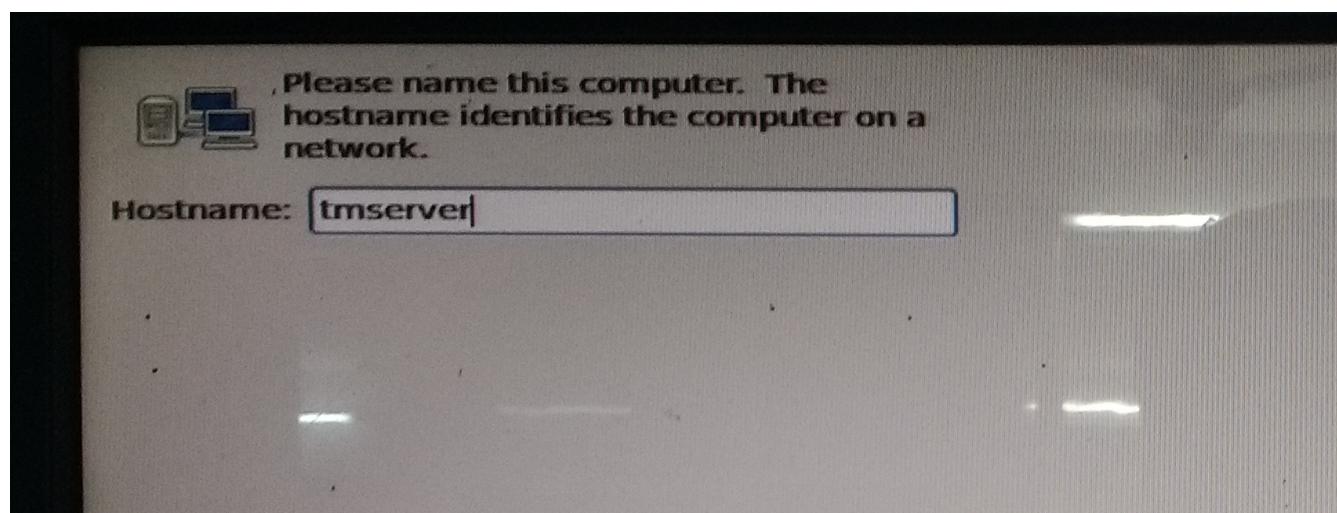
On the next UI, select English and click next

On the next UI, select US English and click next

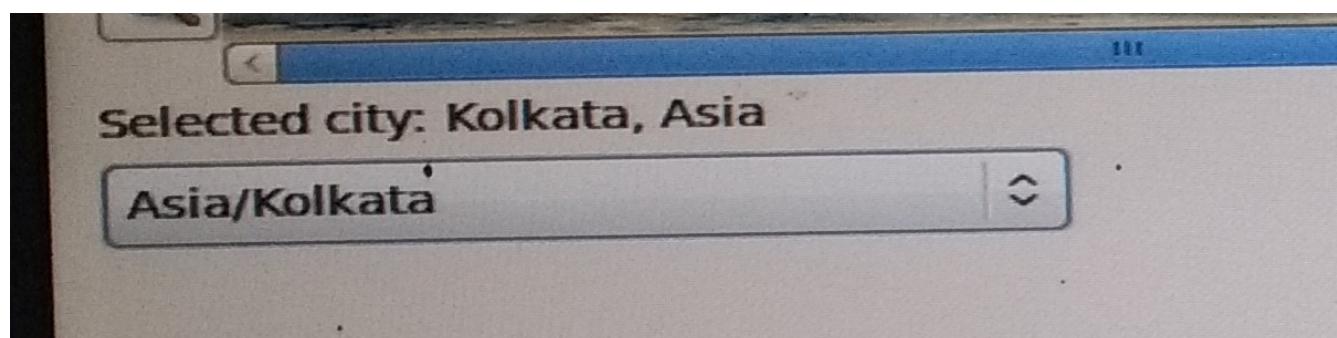
On the next UI select Basic Storage Devices and click next



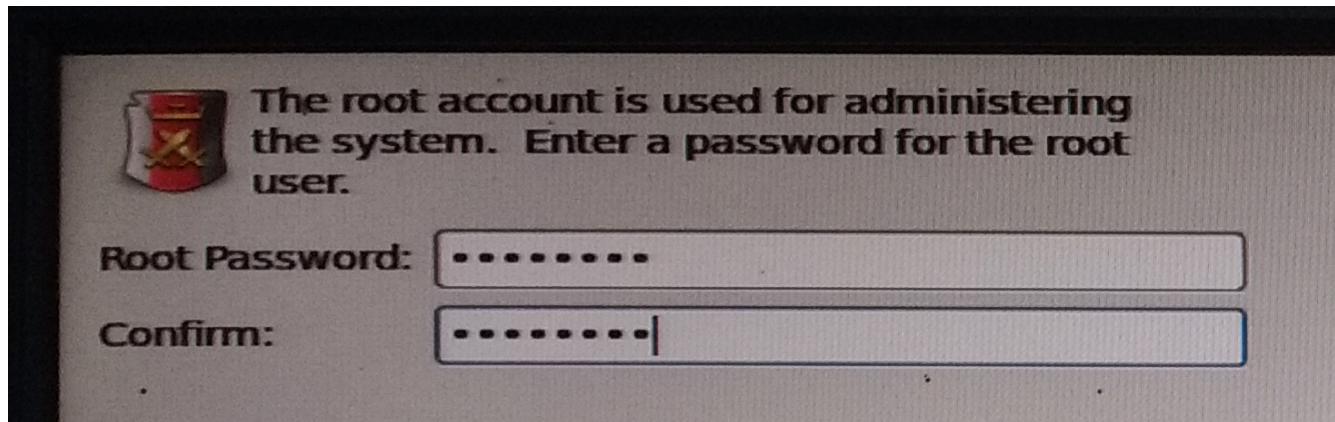
On the next UI, provide the Hostname of your choice (one word) I used tmserver, you can use yournameserver



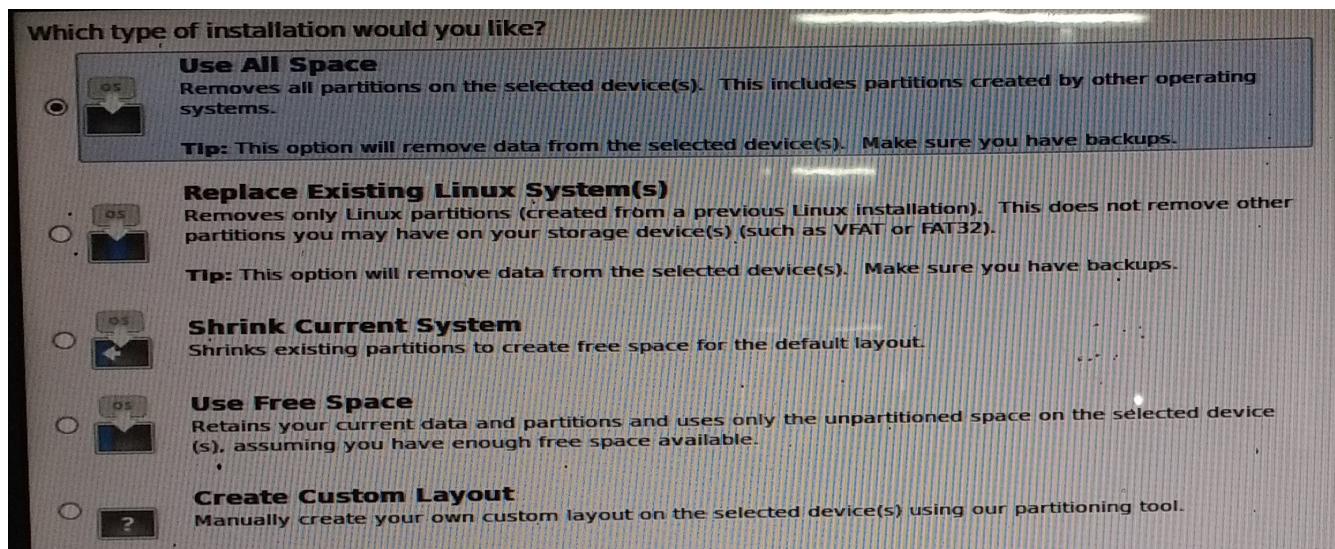
On the next UI Select time zone as follows and click next



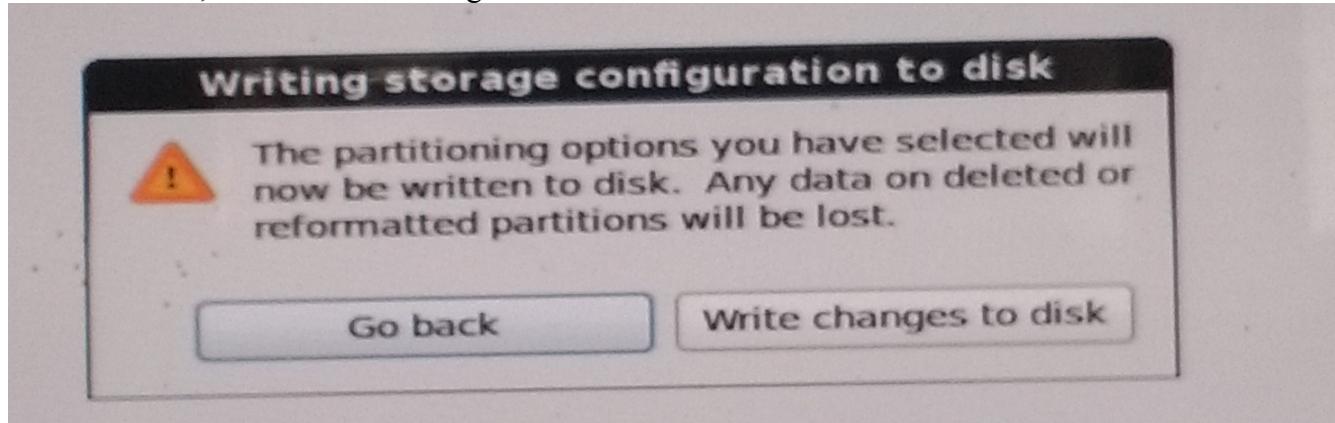
On the next UI, provide password for root user, keep it simple (your surname) and click next



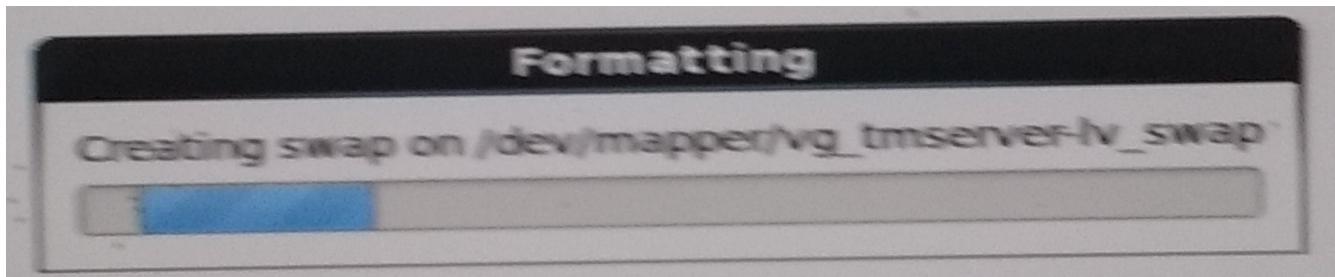
On the next UI, use the (Use All Space) option and click next



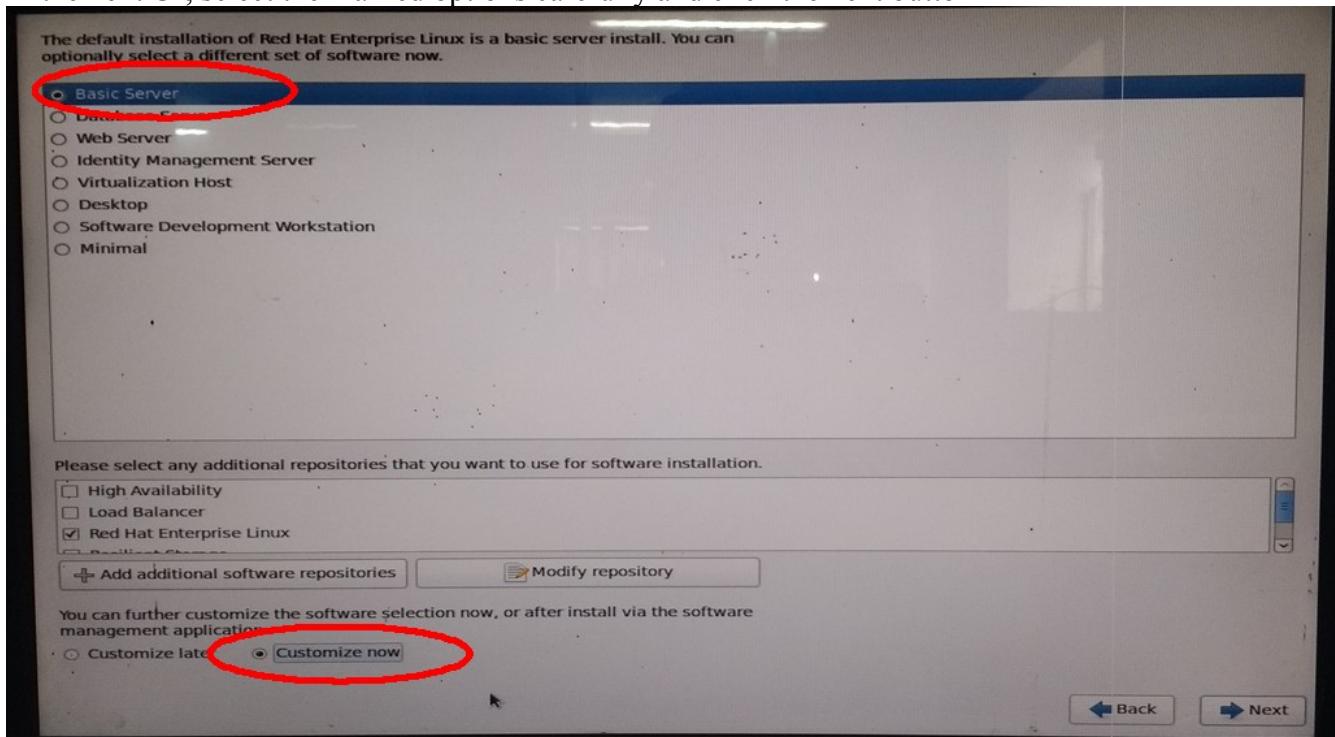
On the next UI, click the write changes to disk button



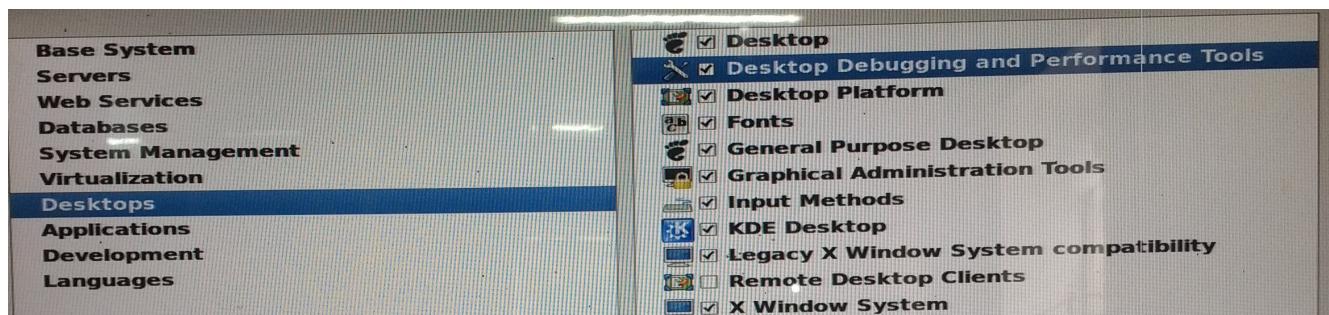
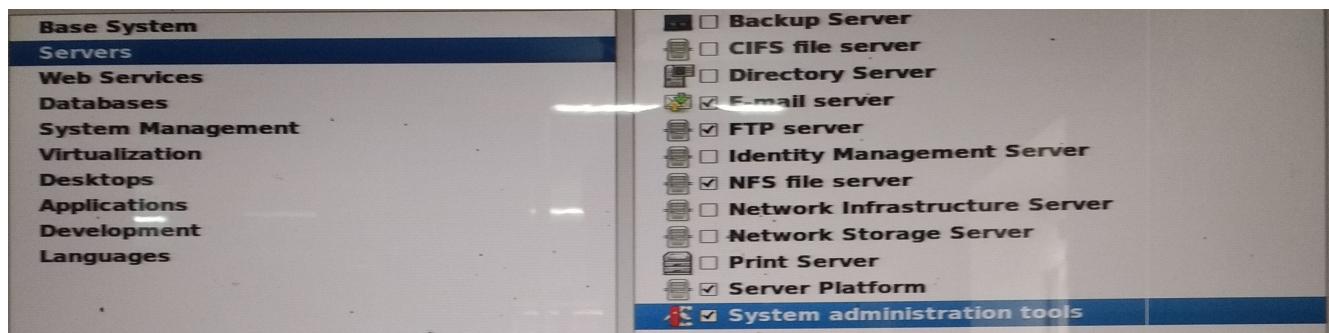
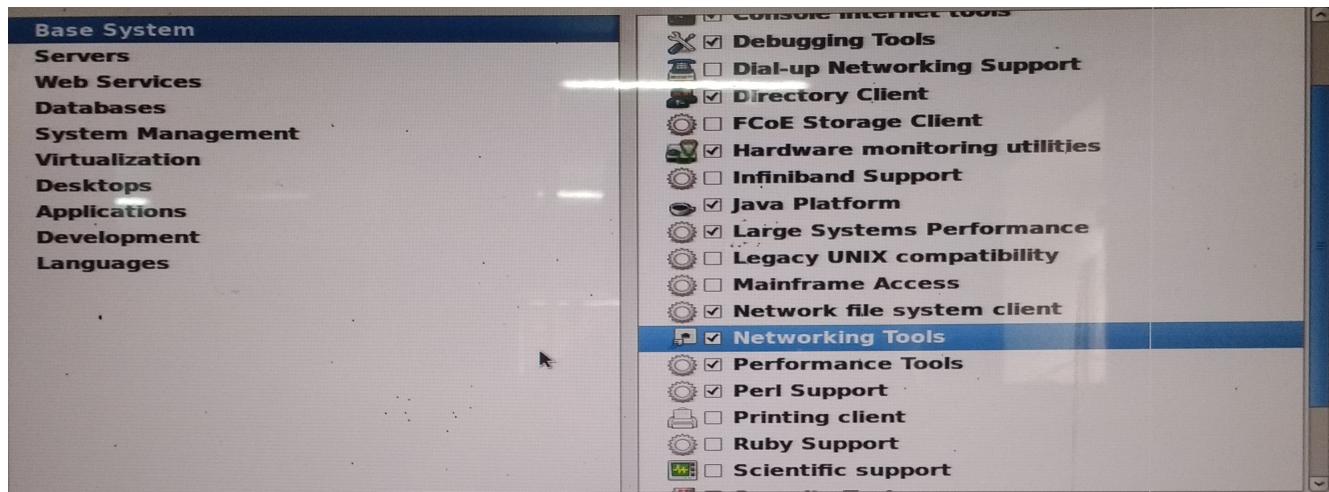
Now wait, for some this, the following will appear

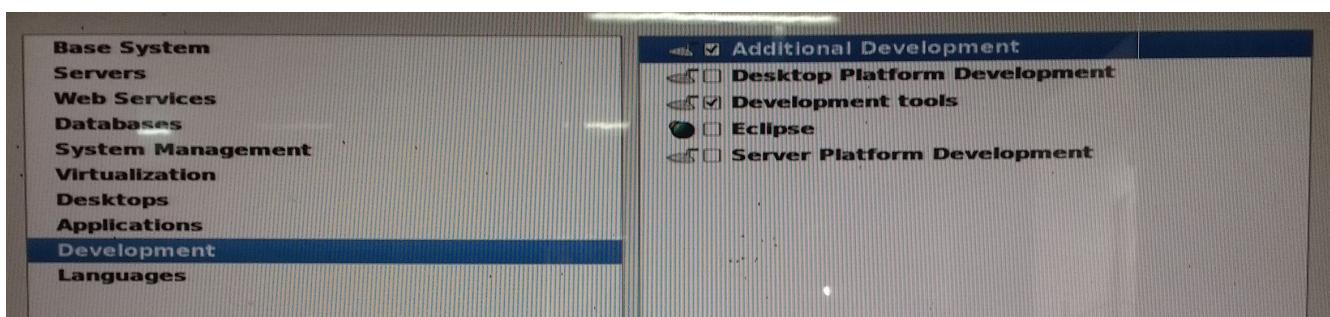
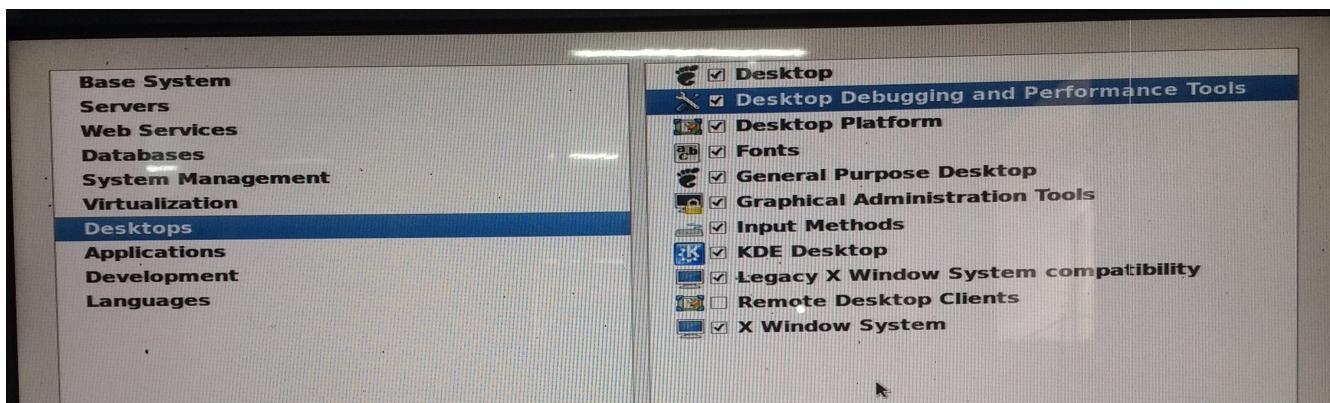


In the next UI, select the marked options carefully and click the next button

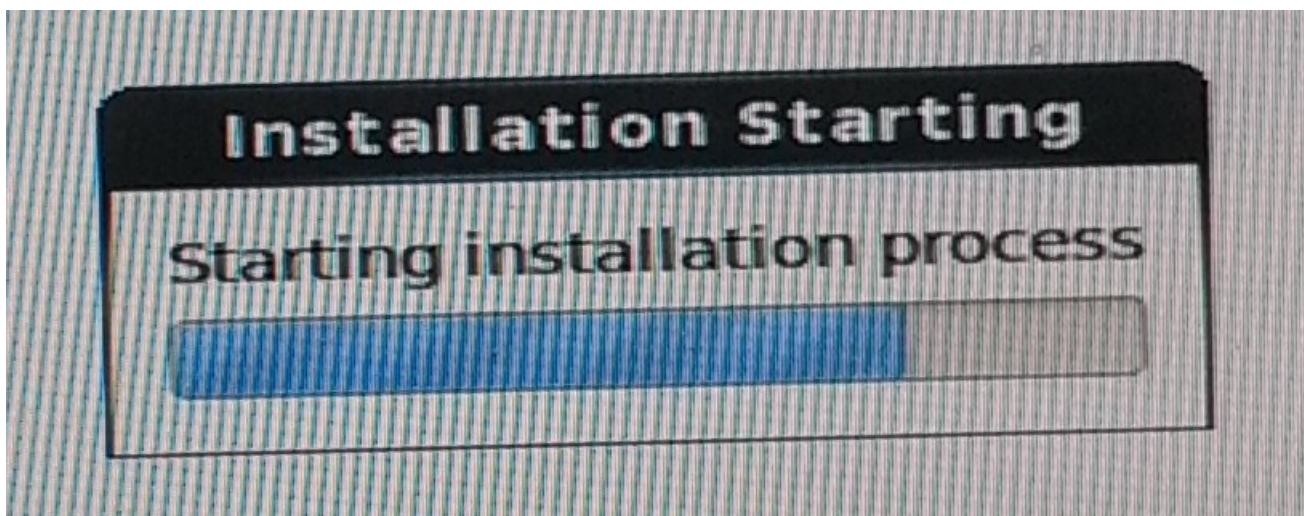


Now be careful, keep selecting the options from the left panel, and see the right panel has the options selected as in the following sequence of images, don't press next, until all options are set as per images.

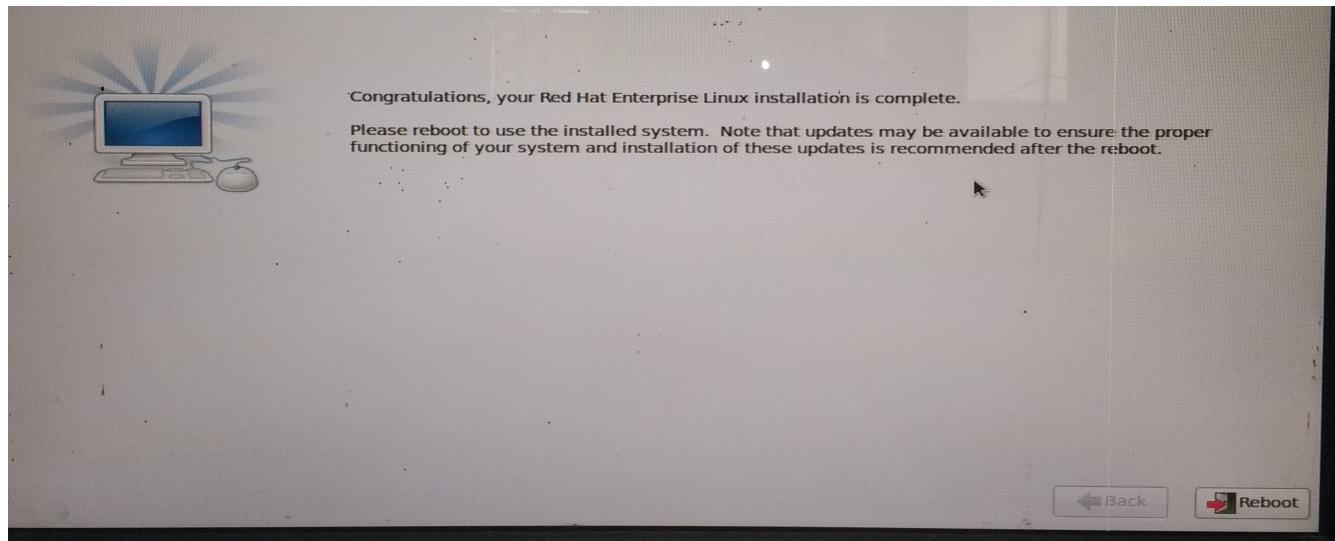




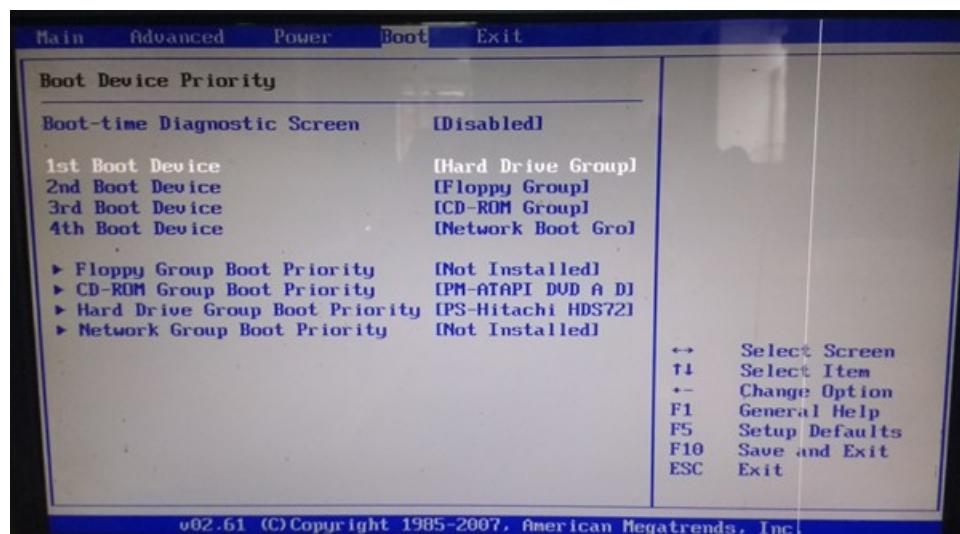
After setting every option (don't worry about the languages option from the left panel), click next. The following will appear,



After waiting for a long time, you will see this UI



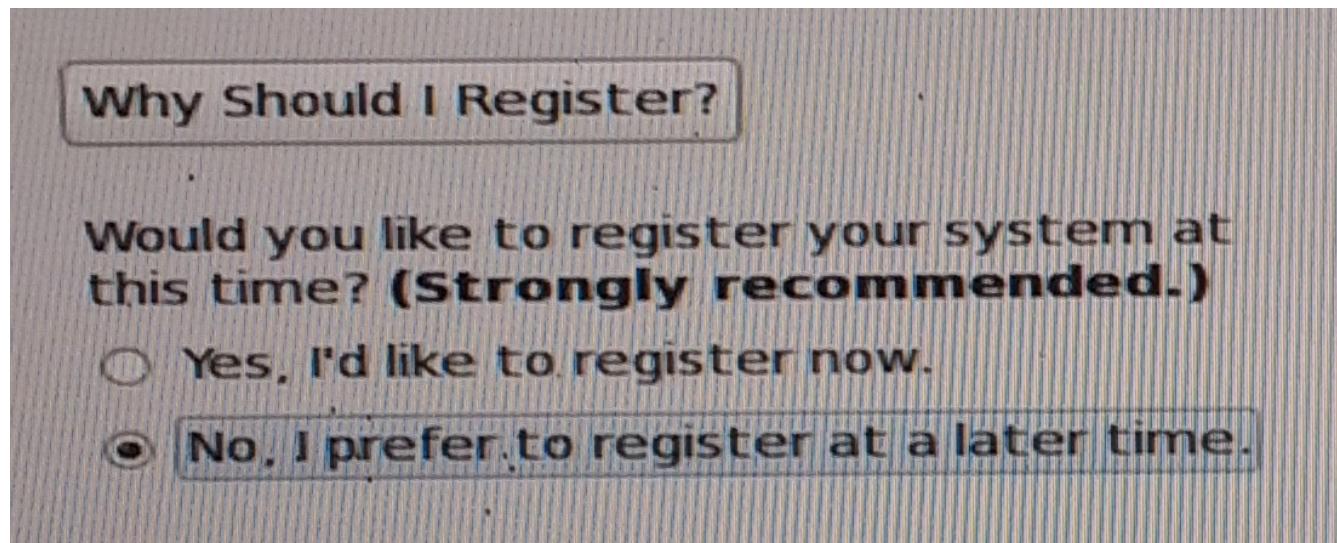
Select Reboot button. Now stay on your toes, and as soon as the option to enter setup appears (before the os loading start), hit the option to enter setup and change the boot sequence and set the first boot device as Hard Disk



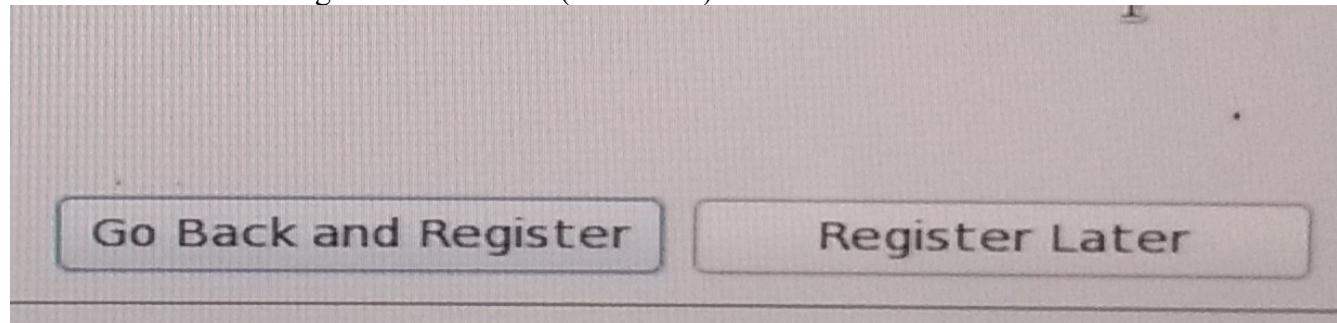
Now on when the system starts the following UI will appear, select the forward button



On the next UI, select (I Agree) and proceed,
Now be careful, on the next UI select No option and proceed,



On the next UI click Register Later button (Be careful)



On the next UI, just click the forward button,

On the next UI, create a user named as (student and everything else as student) and click forward

Create User

You must create a 'username' for regular (non-administrative) use of the system. To create a system 'username', please provide the information requested below.

Username: student

Full Name: student

Password: *****

Confirm Password: *****

A message will appear that the password is weak, select yes and proceed.

On the next ui, see that enable Kdump is checked and click Finish button

other uses.

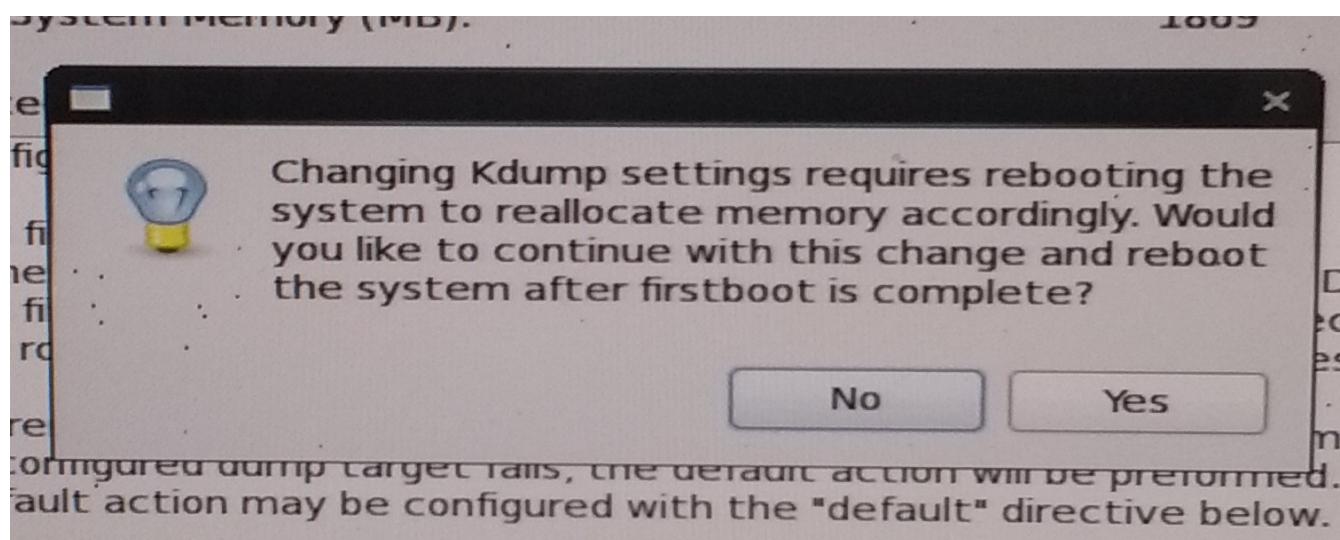
Enable kdump?

Total System Memory (MB):

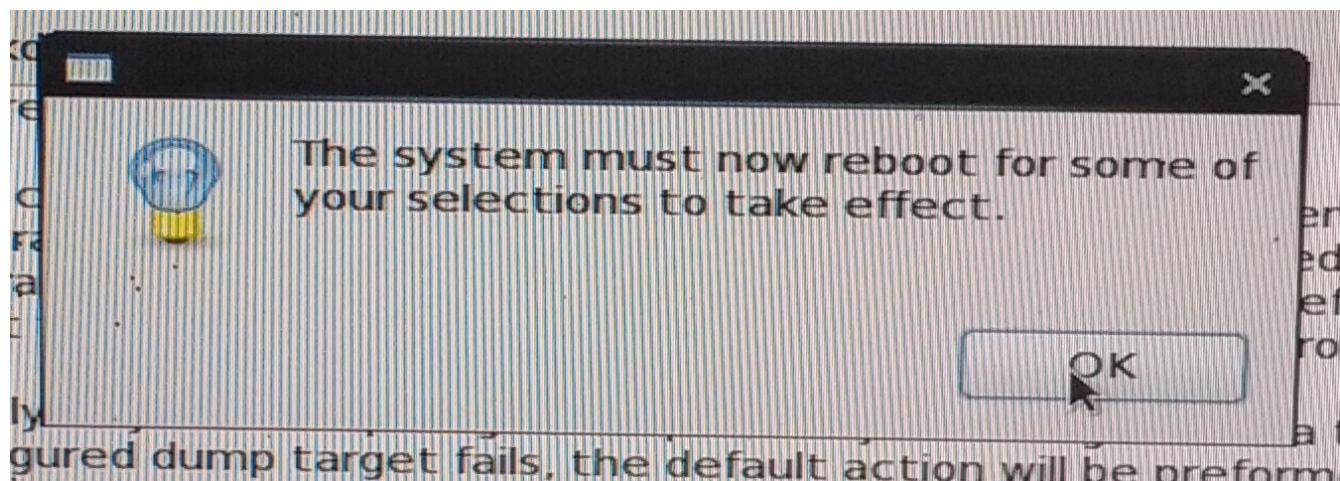
Kdump Memory (MB):

Usable System Memory (MB):

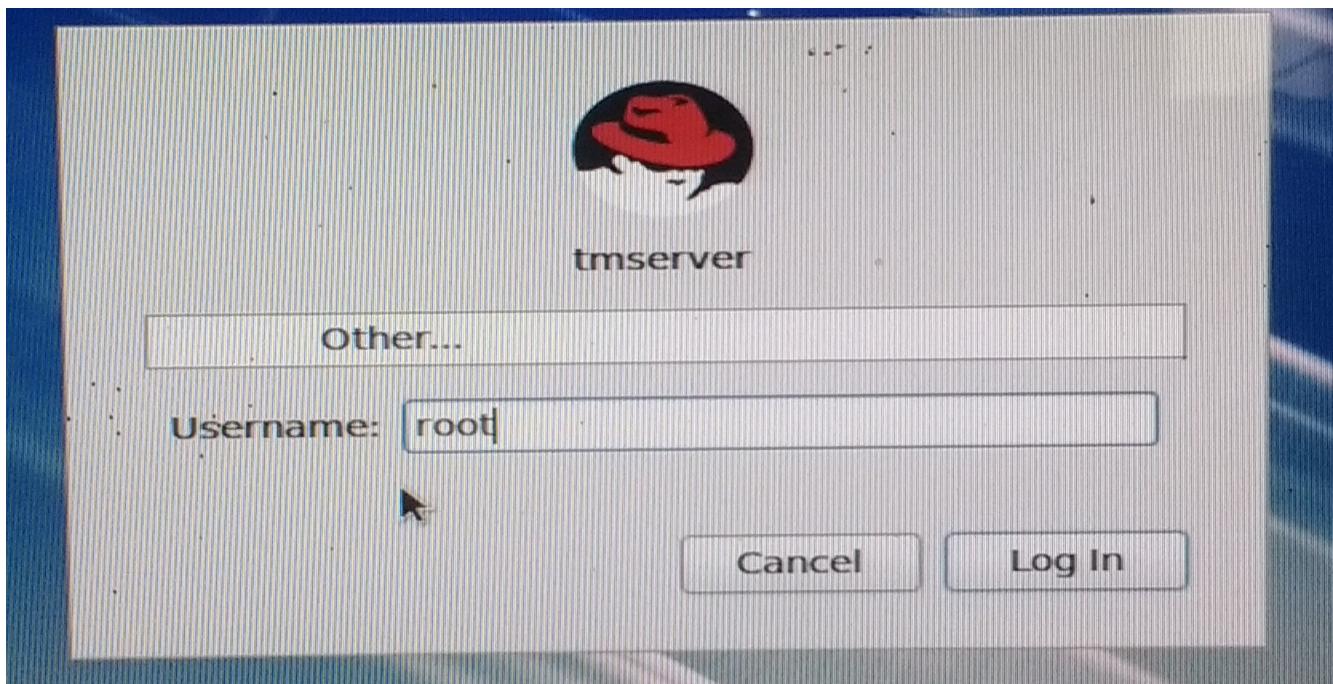
You will be prompted with a message, select the yes button and proceed.



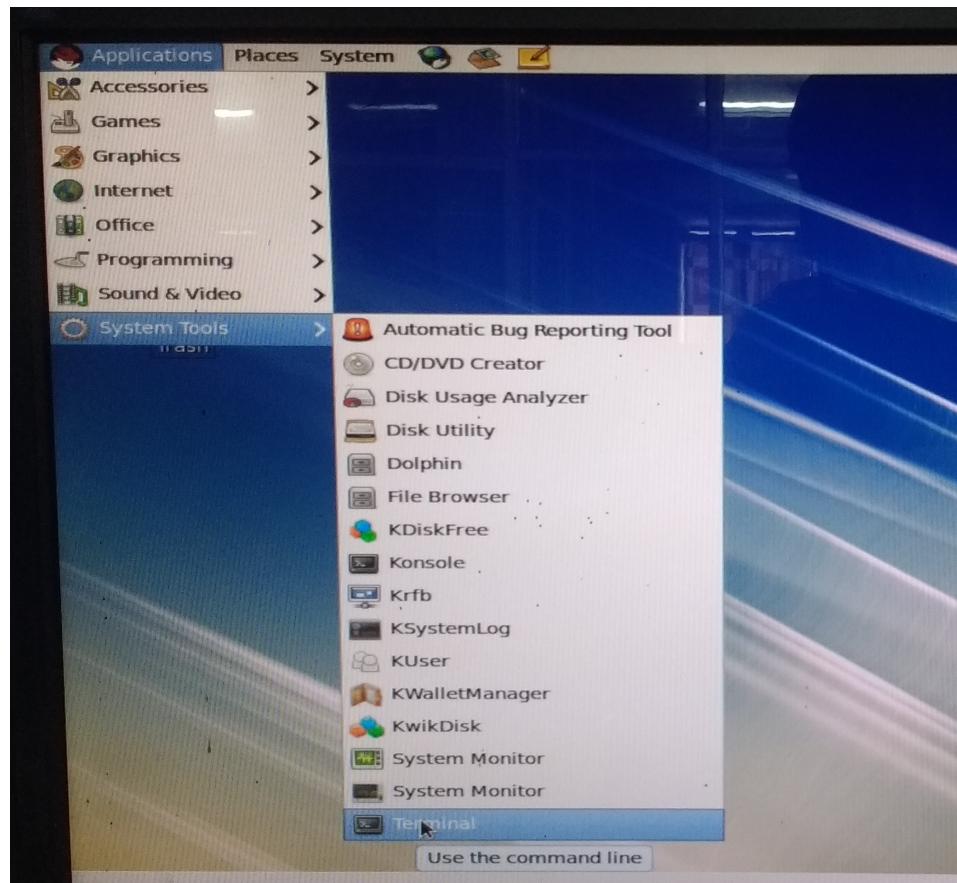
Now you will be prompted with a message that the system will reboot, select ok



When the system reboots, you will be prompted with login option, select other and type the username as root and your set password when asked for and click the log in button



When the desktop appears, select the Application options, then system and then drag and drop the Terminal option on the desktop as shown



Finally your desktop should look like this



Now double click the shortcut to terminal

Now edit the /etc/inittab file using the vi editor as discussed in the classroom session and change 5 to 3 as shown below

```
# System initialization is started by /etc/init/rcS.conf
#
# Individual runlevels are started by /etc/init/rc.conf
#
# Ctrl-Alt-Delete is handled by /etc/init/control-alt-delete.conf
#
# Terminal gettys are handled by /etc/init/tty.conf and /etc/init/serial
# with configuration in /etc/sysconfig/init.
#
# For information on how to write upstart event handlers, or how
# upstart works, see init(5), init(8), and initctl(8).
#
# Default runlevel. The runlevels used are:
#   0 - halt (Do NOT set initdefault to this)
#   1 - Single user mode
#   2 - Multiuser, without NFS (The same as 3, if you do not have network)
#   3 - Full multiuser mode
#   4 - unused
#   5 - X11
#   6 - reboot (Do NOT set initdefault to this)
#
id:3:initdefault:■
- INSERT --
```

The marked line earlier contained 5:initdefault
change it to 3:initdefault

save the file using the technique discussed in the classroom session and then
type

shutdown -r now

The system will reboot. Now the system will start in NON GUI MODE and you will be asked for login name and password, for a start, use student user account that we created.

After login, type

pwd

to print the working directory

Then create folder named as ceg using

mkdir ceg

move into ceg using

cd ceg

now use vi editor to create eg1.c

save it and then

compile using

gcc eg1.c -o eg1.out

for execution type **./eg1.out**

**Note : you don't need to set the path environment variable right now, all is set for you, you can do the same for c++ and java examples
create separate folders cppeg and javaeg**

If this process is successful then we will move on to the next step of configuring other things such as network, mysql, tomcat etc.

Now lets say that things are not getting installed, because the GUI part is not available or whatever. What you can try is the following. While installation (as mentioned on page number 7), uncheck all the options against desktop and complete the installation. Now what has happened is the installation got done without the desk top (GUI) part and the student login also didn't get created. No problems, we can still do that.

Login as root and mount the pen drive with the iso file. (Refer : TMLinuxWorks2.pdf)

After mounting the pen drive as /mnt/sdb1, now we will copy the iso file from the pen drive to our hard drive.

In /root folder create a folder named as RHEL6.5

then type the following

```
cp /mnt/sdb1/name_of_the_iso_file.extension .
```

Now the file has been copied to /root/RHEL6.5 folder

Now we will mount it as /mnt/dvd for that

create a folder named as dvd under mount using mkdir /mnt/dvd

Then type the following to mount the dvd

```
mount -r -t iso9660 -o loop -v /root/RHEL6.5/rhel-server-6.5-x86_64-dvd.iso /mnt/dvd
```

you should not get a message that file or something not found

to verify just use cd /mnt/dvd and use ls

Now we need to configure our repo file to enable installation from the mounted image for that

move to /etc/yum.repos.d folder using cd /etc/yum.repos.d

now it it create a file named as rhel-dvd.repo using vi editor, it it type the following
[dvd]

name=Red Hat Enterprise Linux Installation DVD

baseurl=file:///mnt/dvd/Server

enabled=0

Note : (S) of Server is upper case

Now move to /etc using cd /etc

in it using vi editor edit the yum.conf file and set the value of

change the line

gpgcheck=1

to

gpgcheck=0

Now save it and for installation of lets say Development Tools, type

```
yum -y groupinstall --enablerepo=dvd "Development Tools"
```

Note the spelling of the group name should match the spelling of show group after page number 5 of this pdf file.