



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

Batch: B-1 Roll No.: 1711074

Experiment / assignment / tutorial No. _____

Grade: AA / AB / BB / BC / CC / CD / DD

Signature of the Staff In-charge with date

Batch: B-1 Roll No.: 1711074

Experiment / Assignment / Tutorial No.: 1

Title: Introduction and installation of Linux Operating System.

Objective: Use of VMware for installation of Ubuntu OS.

C01: Understand the fundamentals of Open Source environment

Expected Outcome of Experiment:

1. Understand the fundamentals of network administration with Open source.

Books/ Journals/ Websites referred:

1. <https://help.ubuntu.com/10.04/serverguide/network-configuration.html>
2. <http://www.yolinux.com/TUTORIALS/LinuxTutorialNetworking.html>

Pre Lab/ Prior Concepts:

Ubuntu is a computer **operating system** based on the Debian Linux distribution and distributed as free and open source software, using its own desktop environment.

K. J. Somaiya College of Engineering, Mumbai-77

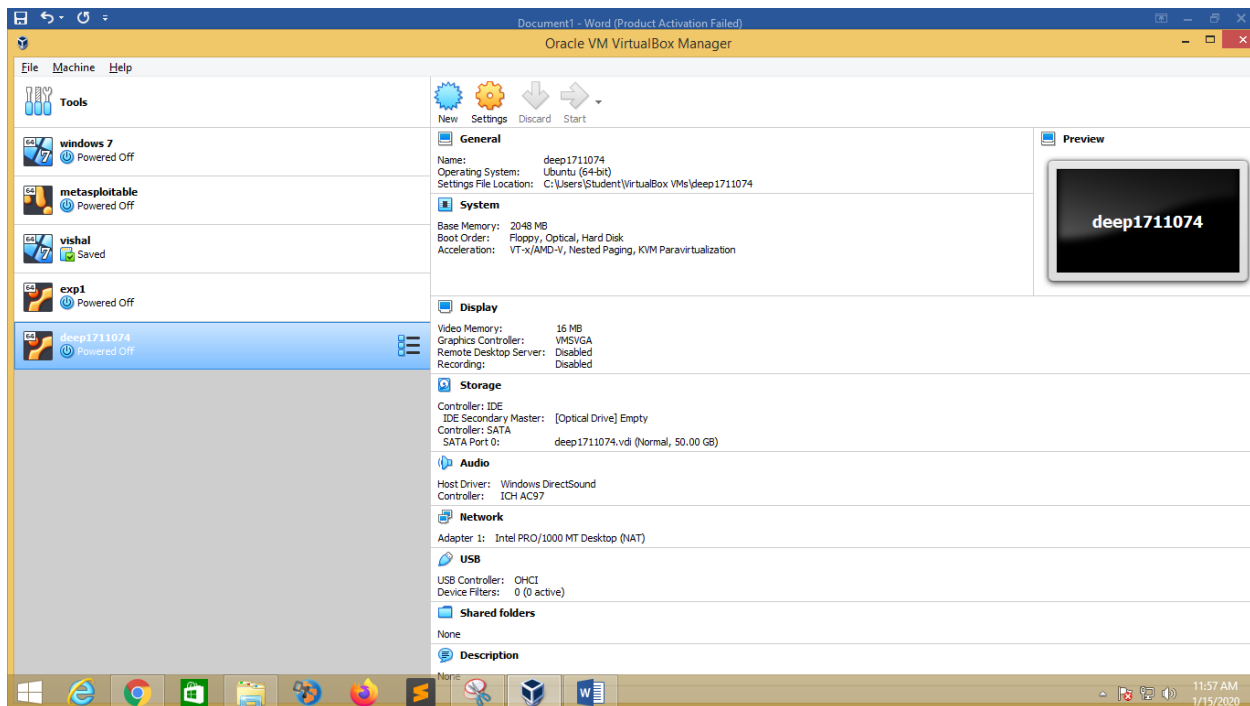
(Autonomous College Affiliated to University of Mumbai)

Implementation details:

Installation Steps:

INSTALLING UBUNTU ON WINDOWS:-

Open ORACLE VM BOX and create a new virtual machine by clicking on **New**.



K. J. Somaiya College of Engineering, Mumbai-77

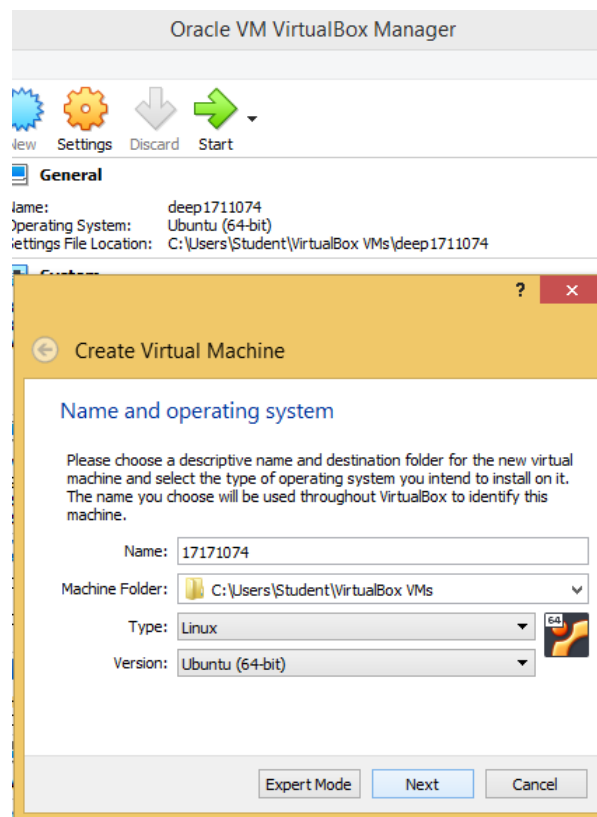
(Autonomous College Affiliated to University of Mumbai)

Enter the name of the machine and select the type of software you want to install.

Here the installed software is of LINUX.

Upload the version you want to install on the virtual machine.

Here the version to be installed is Ubuntu (64 bit).

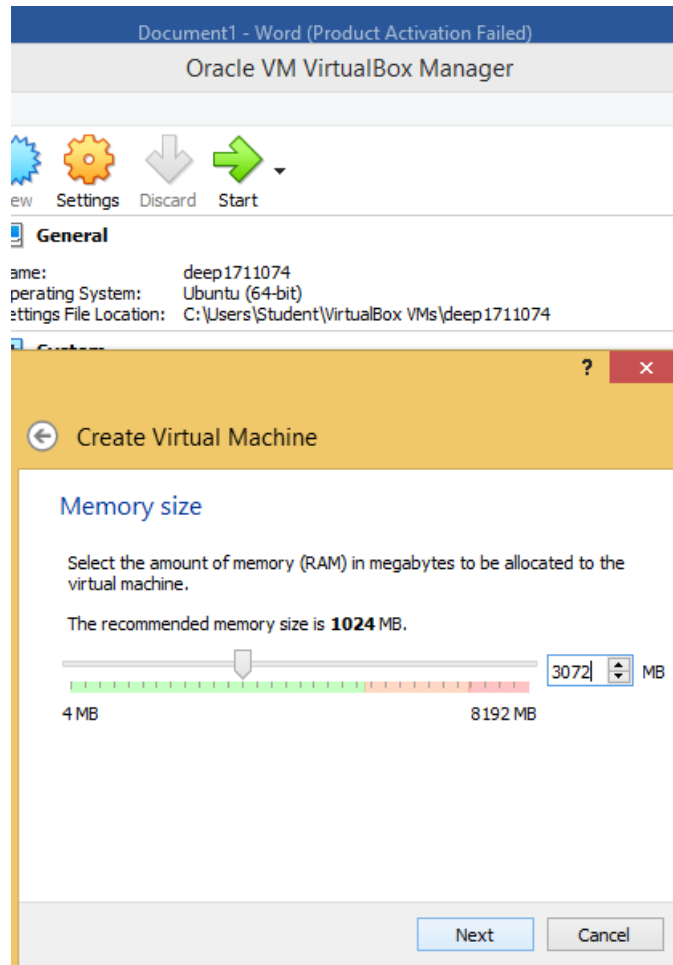


K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

Assign memory size to the machine.

Here 3072 MB has been assigned.

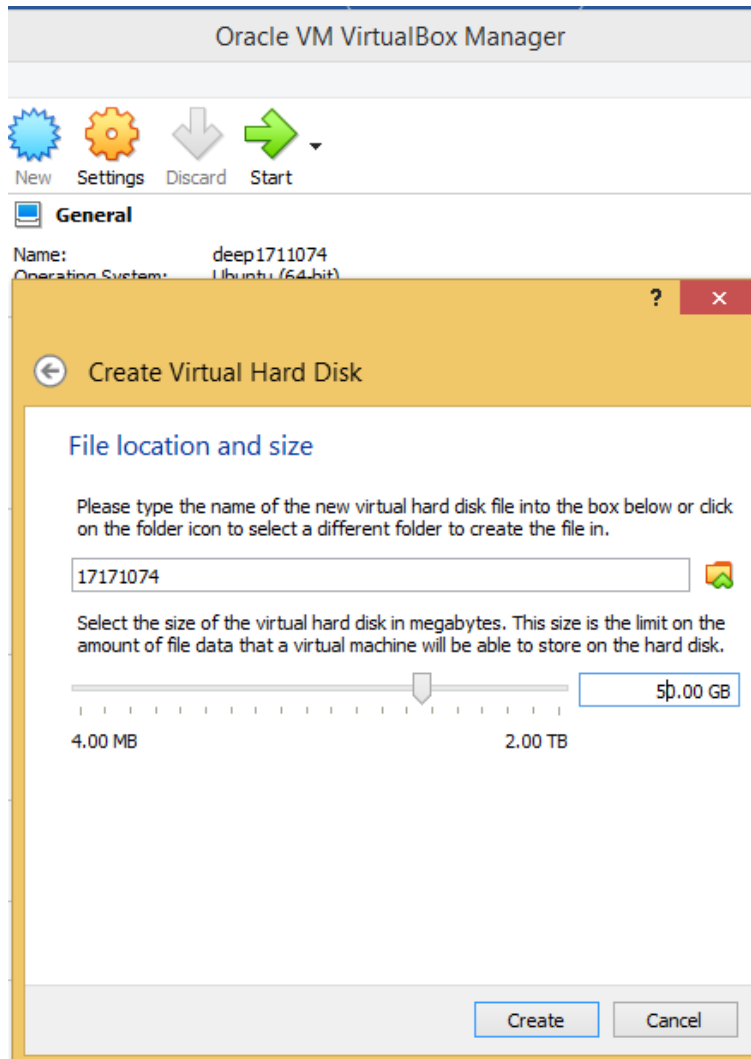


K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

Select the virtual hard disk size.

Here 50 GB has been selected.

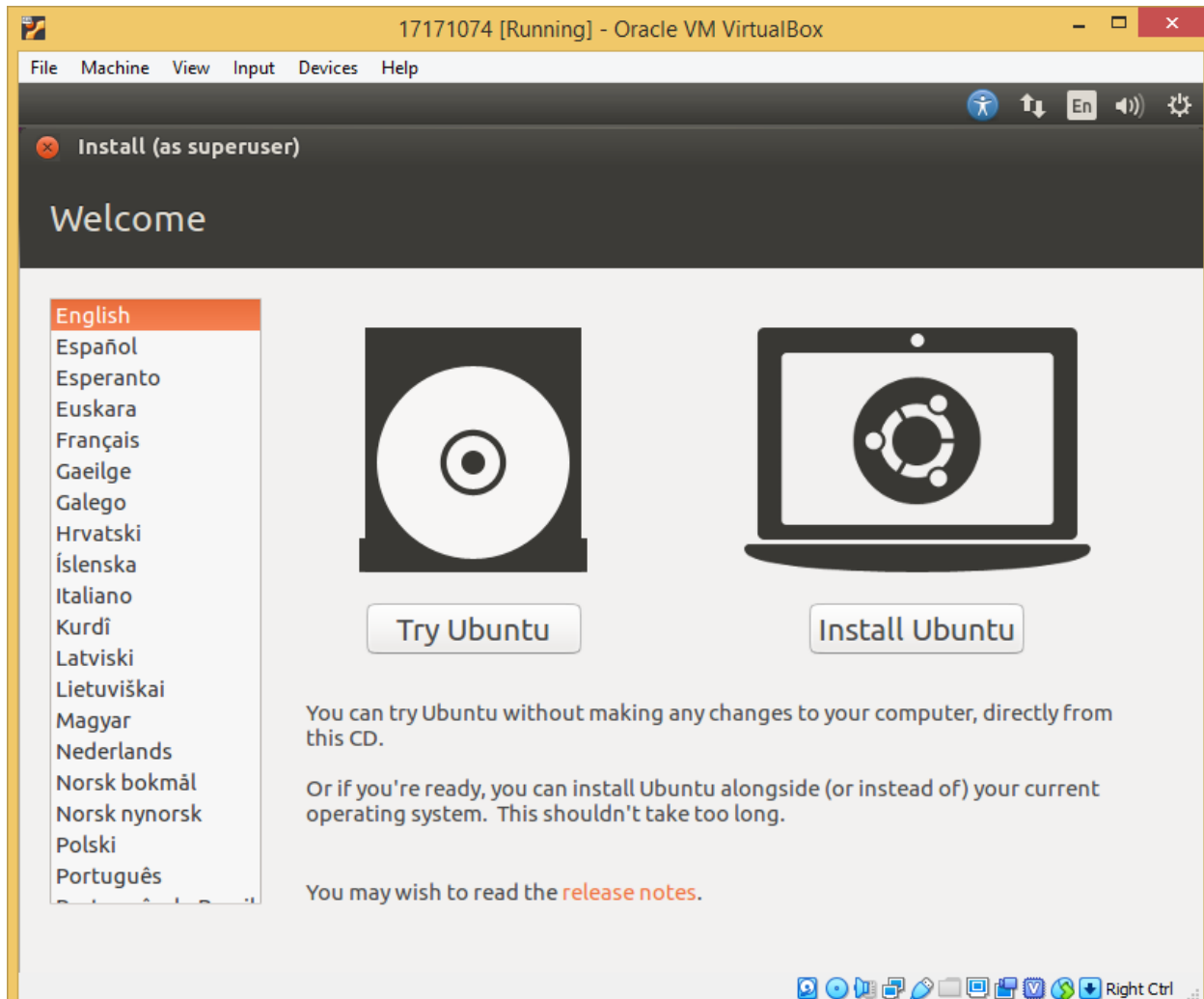


K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

Install Ubuntu by clicking Install Ubuntu.

Here Ubuntu (any software) can also be tried without making any changes to the disks.



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

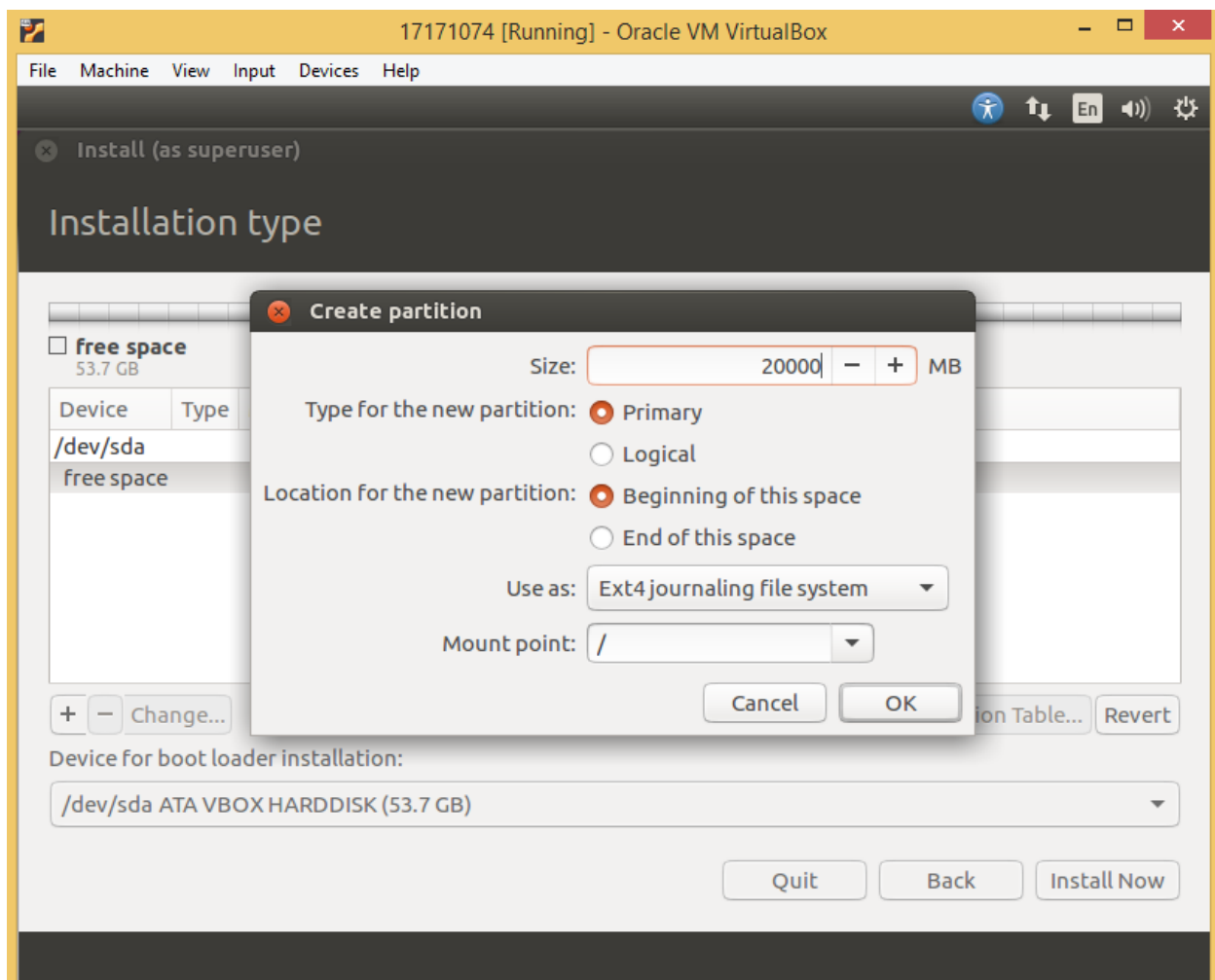
Make partitions for root directory, home directory and swap area.

20 GB is assigned to the root directory.

It is used as Ext4 Journaling File System.

A journaling filesystem is a filesystem that maintains a special file called a journal that is used to repair any inconsistencies that occur as the result of an improper shutdown of a computer.

Ext 4 is a successor for Ext 3 version.

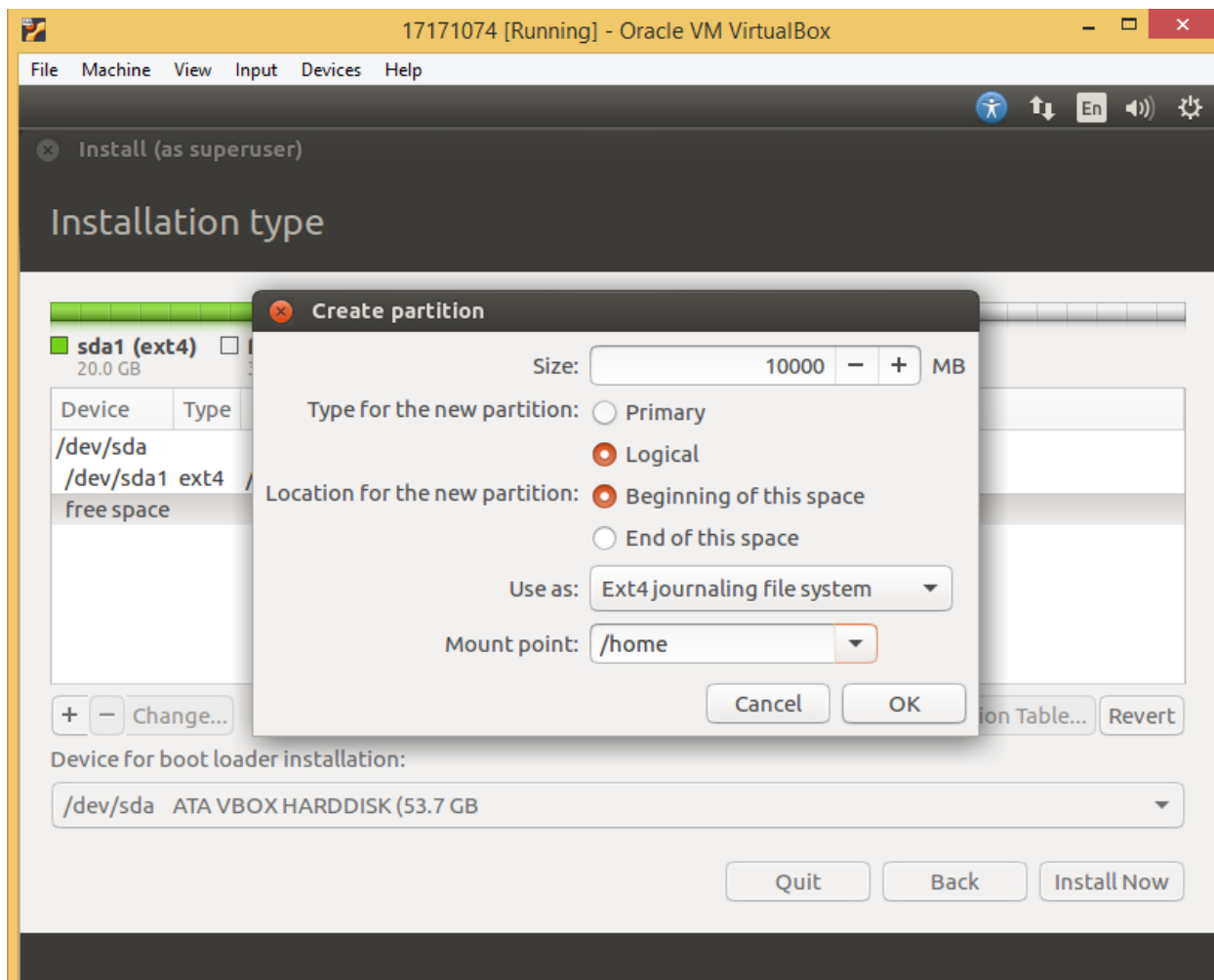


K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

10000 MB is being assigned to the home directory.

It is also used as Ext4 journaling system.



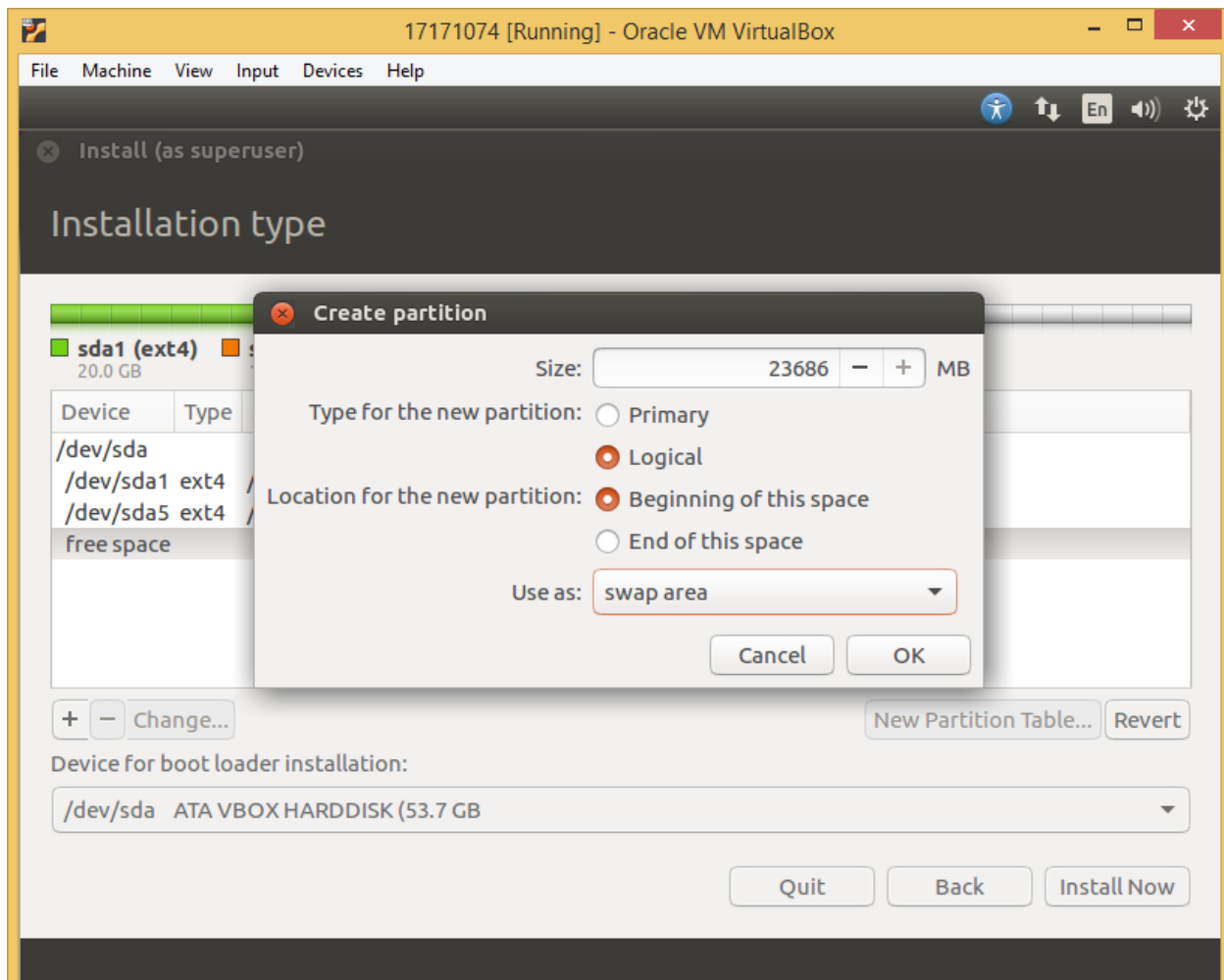
K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

For swap area remaining 23686 MB is assigned.

Swap space is the area on a hard disk which is part of the Virtual Memory of your machine, which is a combination of accessible physical memory (RAM) and the swap space.

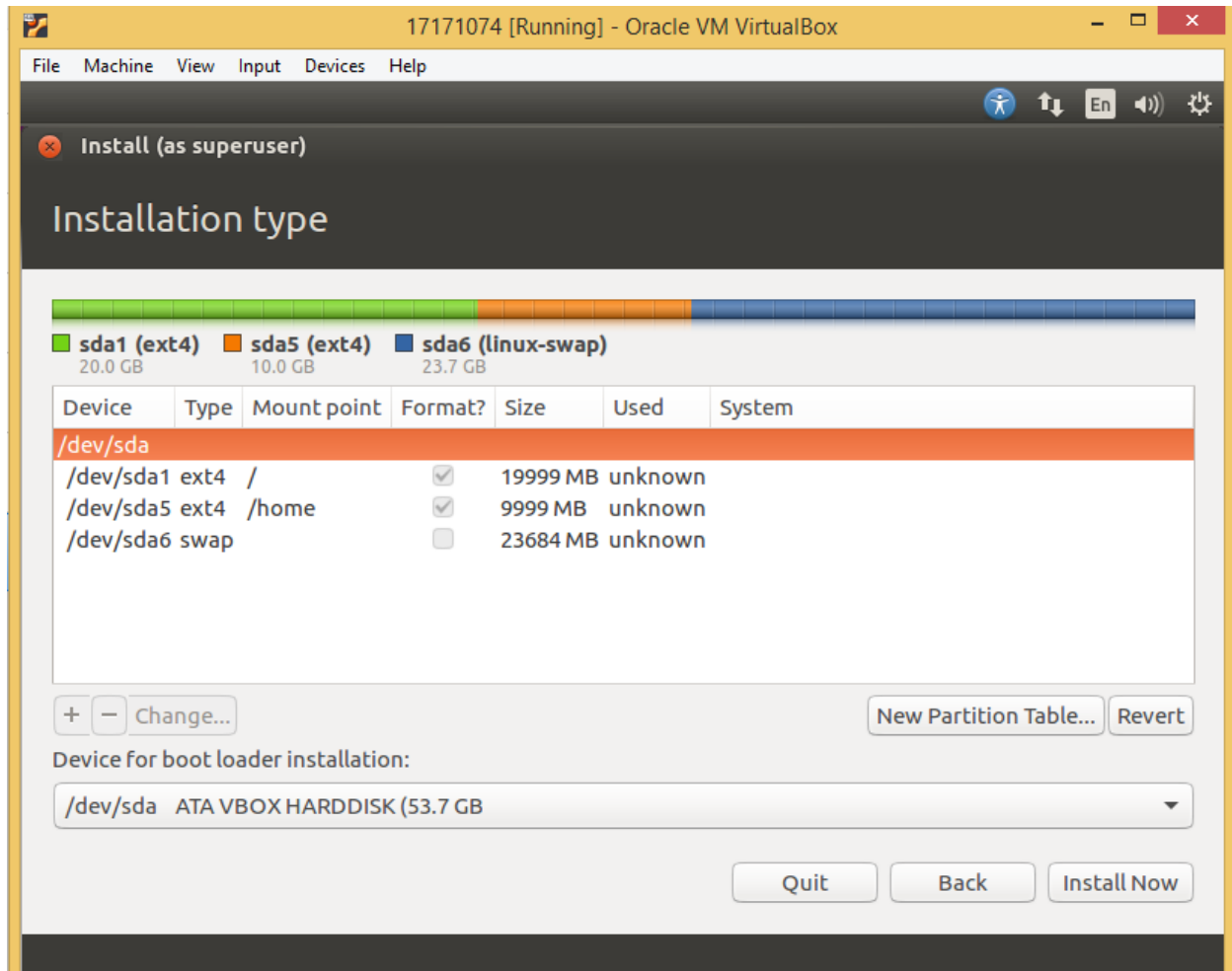
Swap space temporarily holds memory pages that are inactive.



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

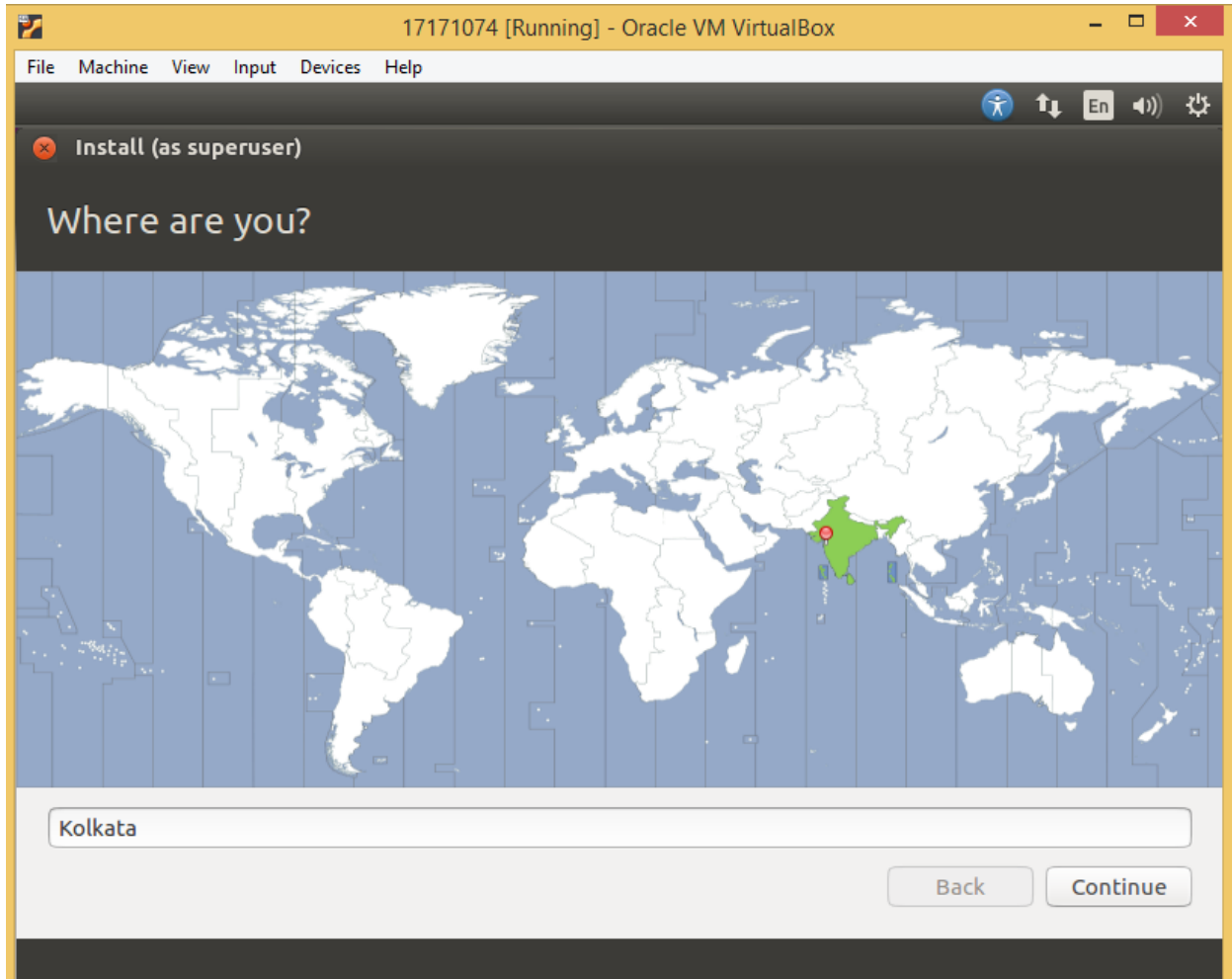
Now we can install Ubuntu by clicking on Install Now.



K. J. Somaia College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

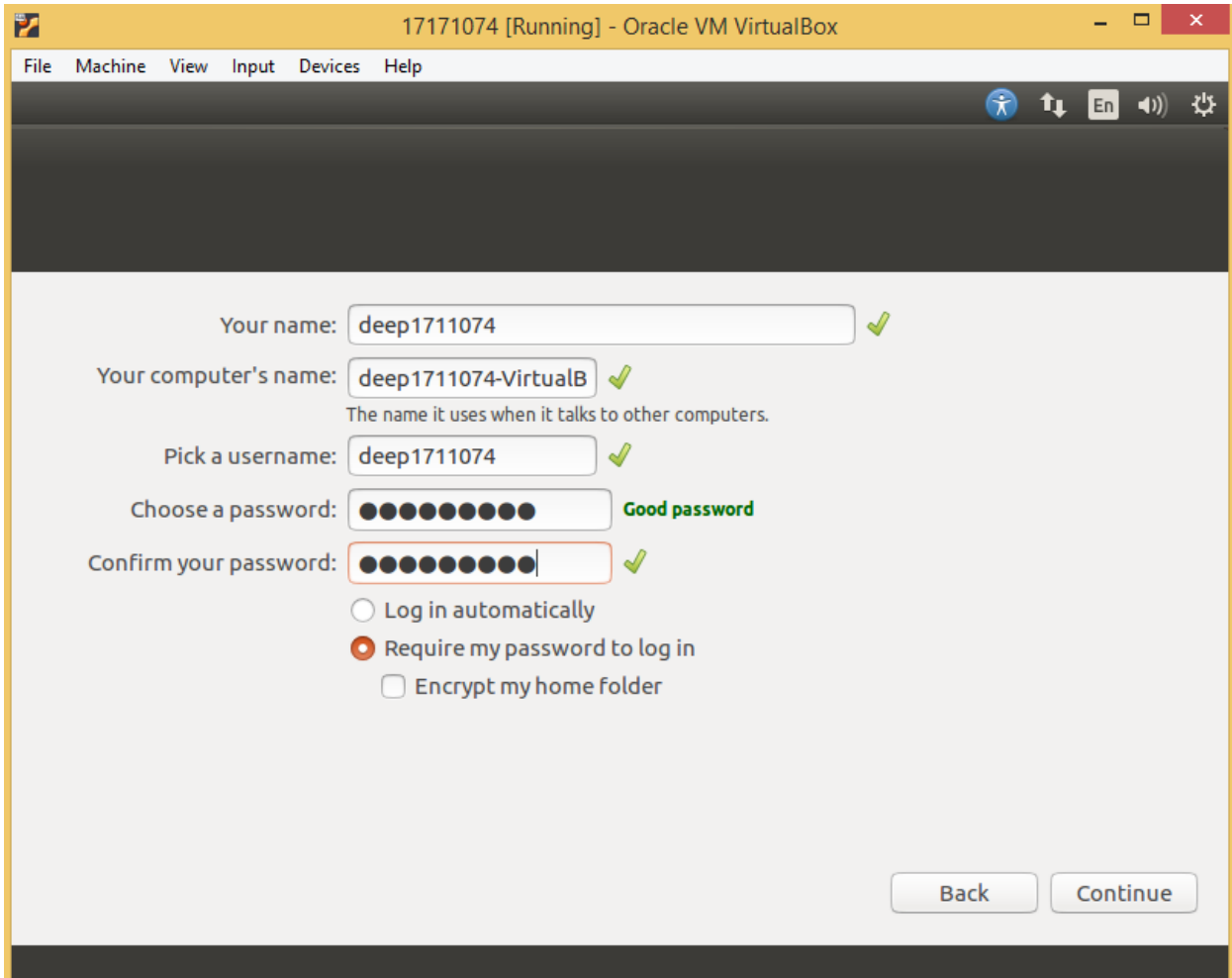
Select the appropriate time zone for the system to function.



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

Create a username and password to login into the software on the virtual machine.



17171074 [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Your name: ✓

Your computer's name: ✓
The name it uses when it talks to other computers.

Pick a username: ✓

Choose a password: Good password

Confirm your password: ✓

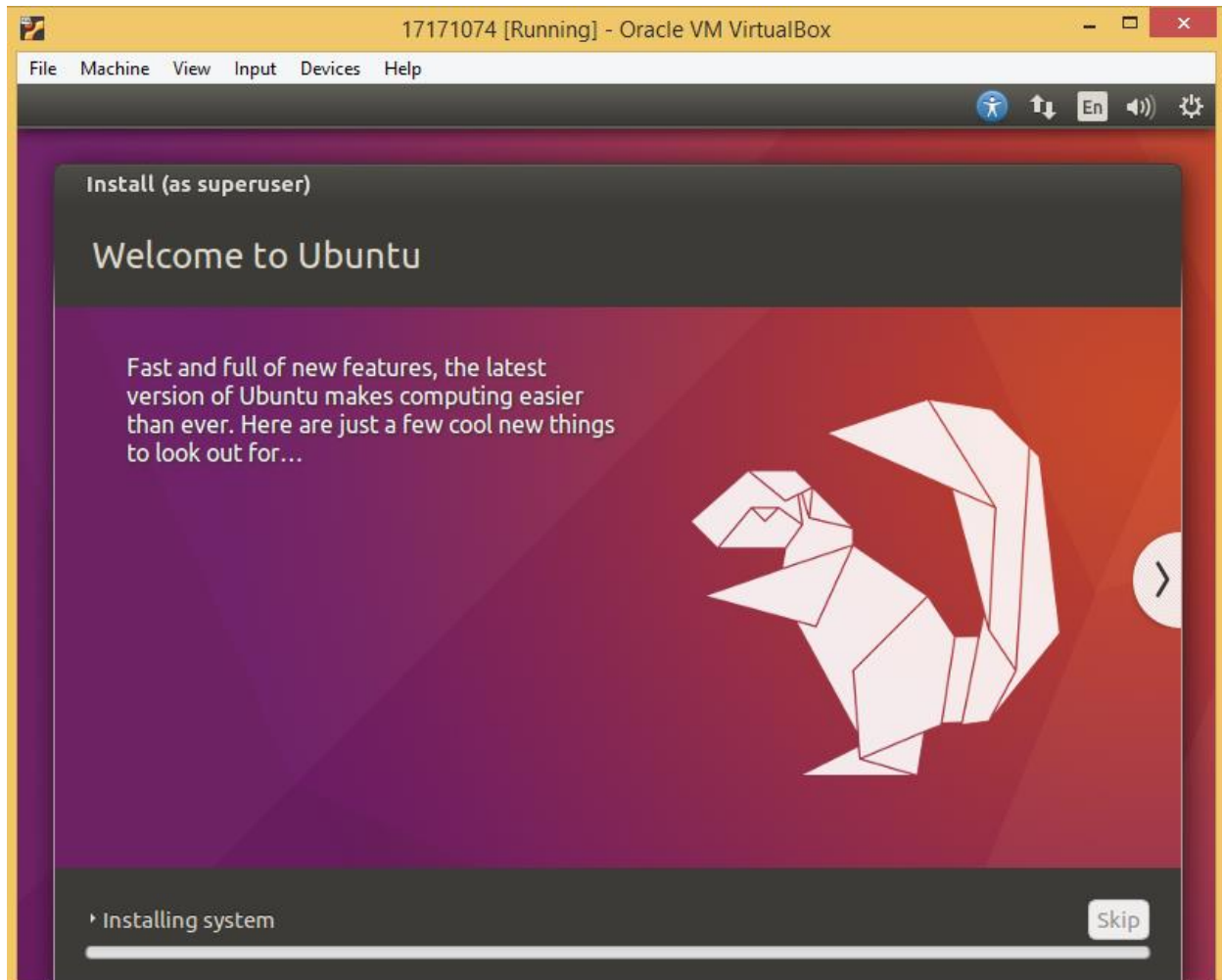
☐ Log in automatically
☒ Require my password to log in
☐ Encrypt my home folder

Back Continue

K. J. Somaiya College of Engineering, Mumbai-77

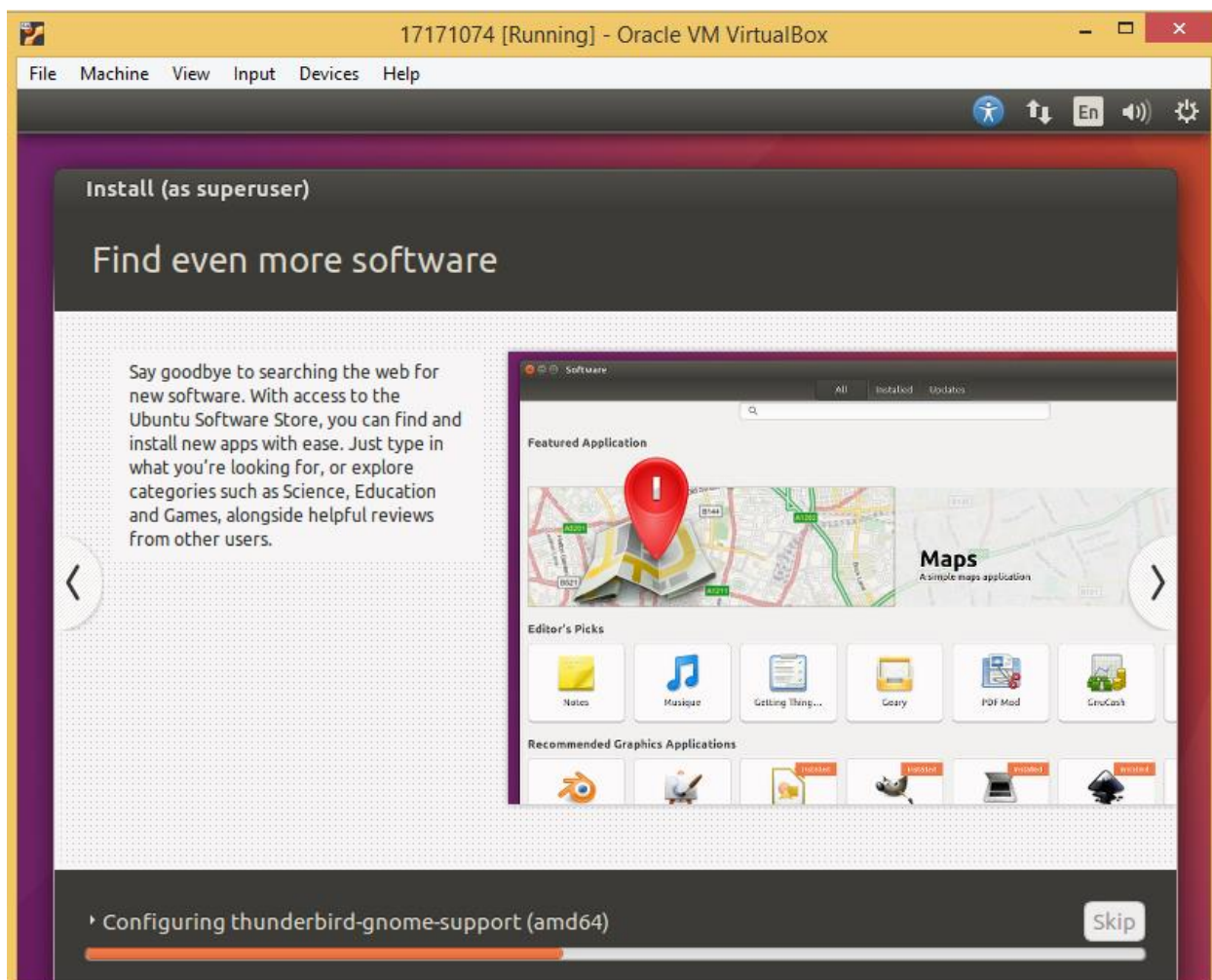
(Autonomous College Affiliated to University of Mumbai)

The system will now be installed.



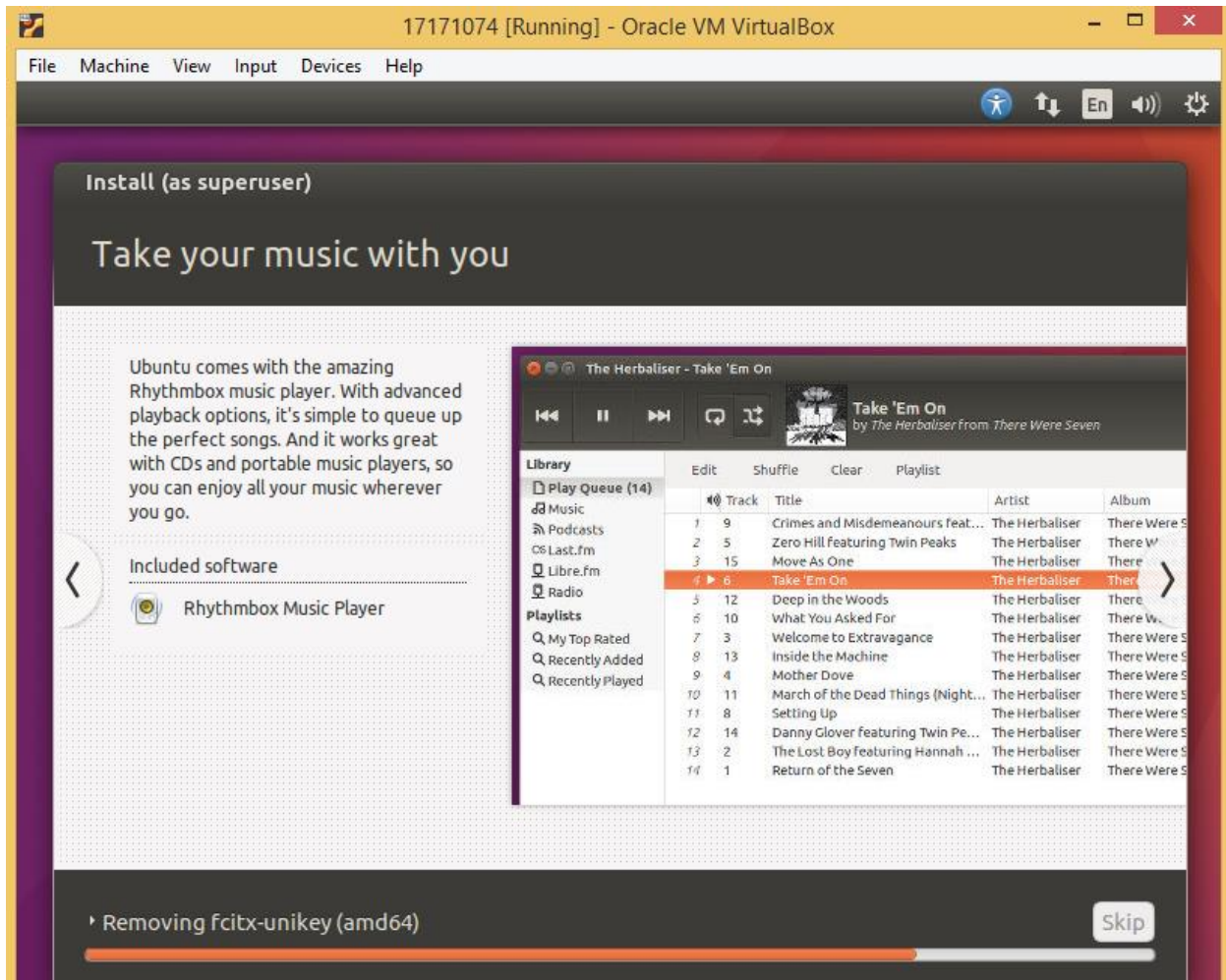
K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)



K. J. Somaiya College of Engineering, Mumbai-77

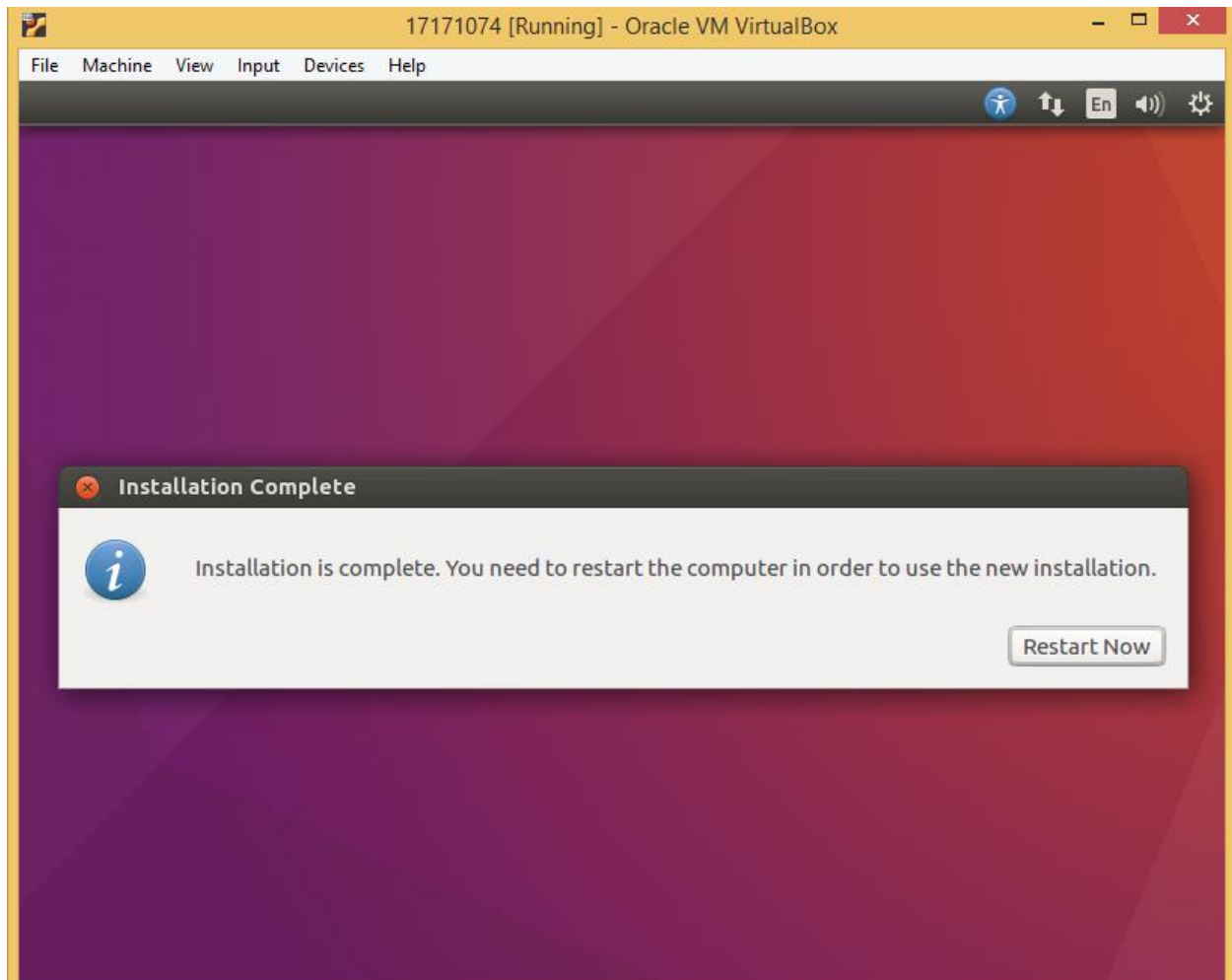
(Autonomous College Affiliated to University of Mumbai)



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

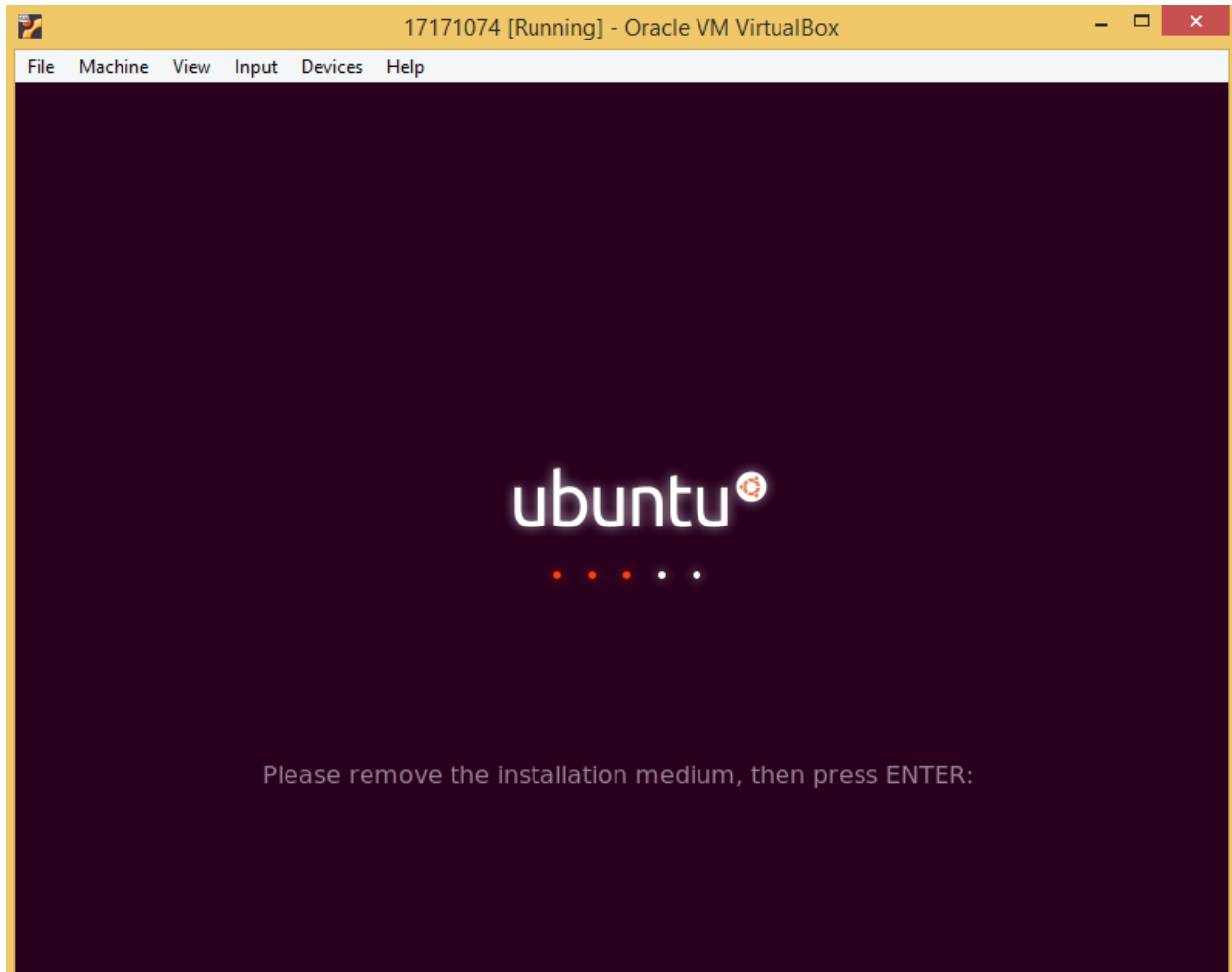
Once the installation is complete restart the computer by clicking on the Restart Now.



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

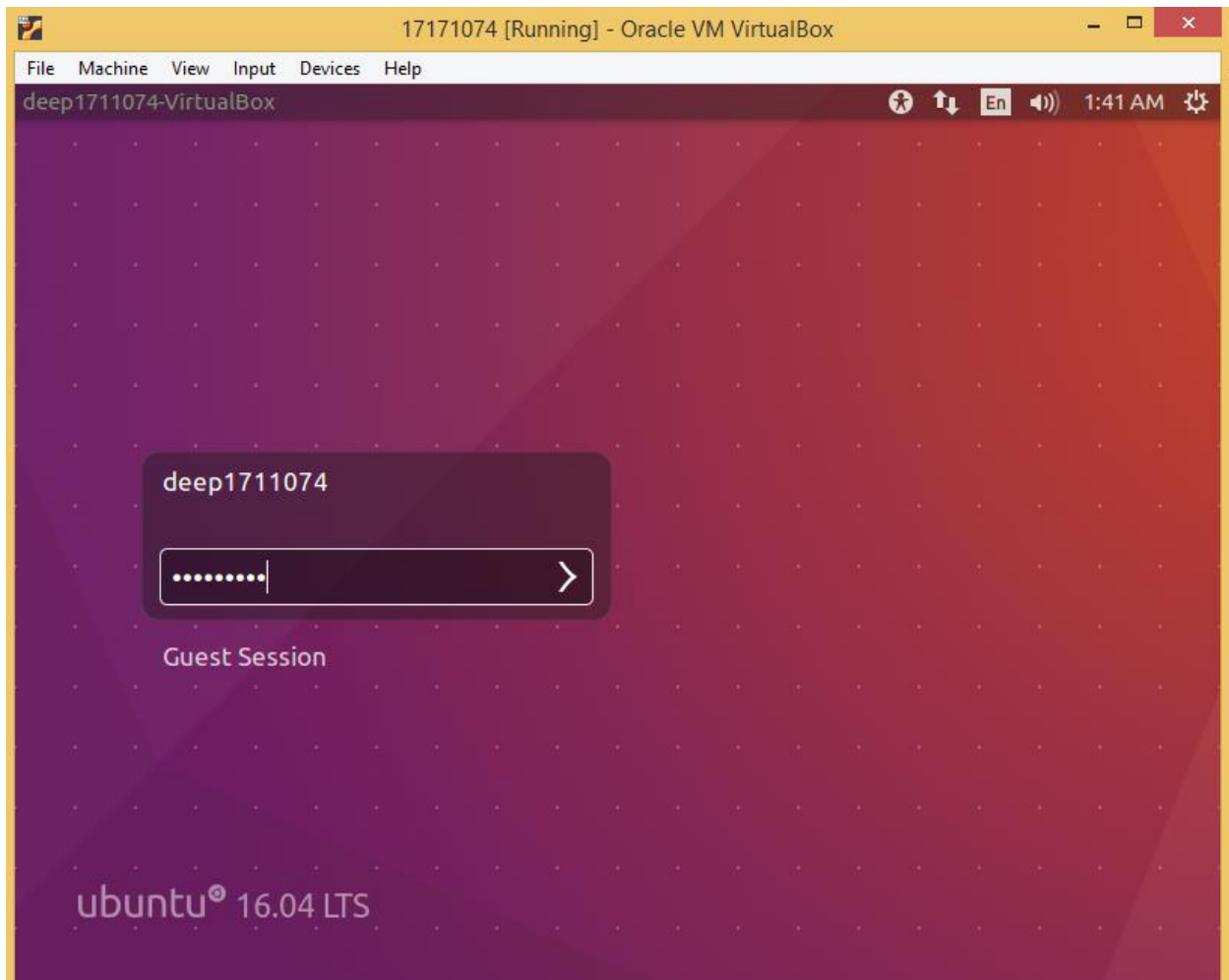
Once the restart is complete the OS is ready to run.



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

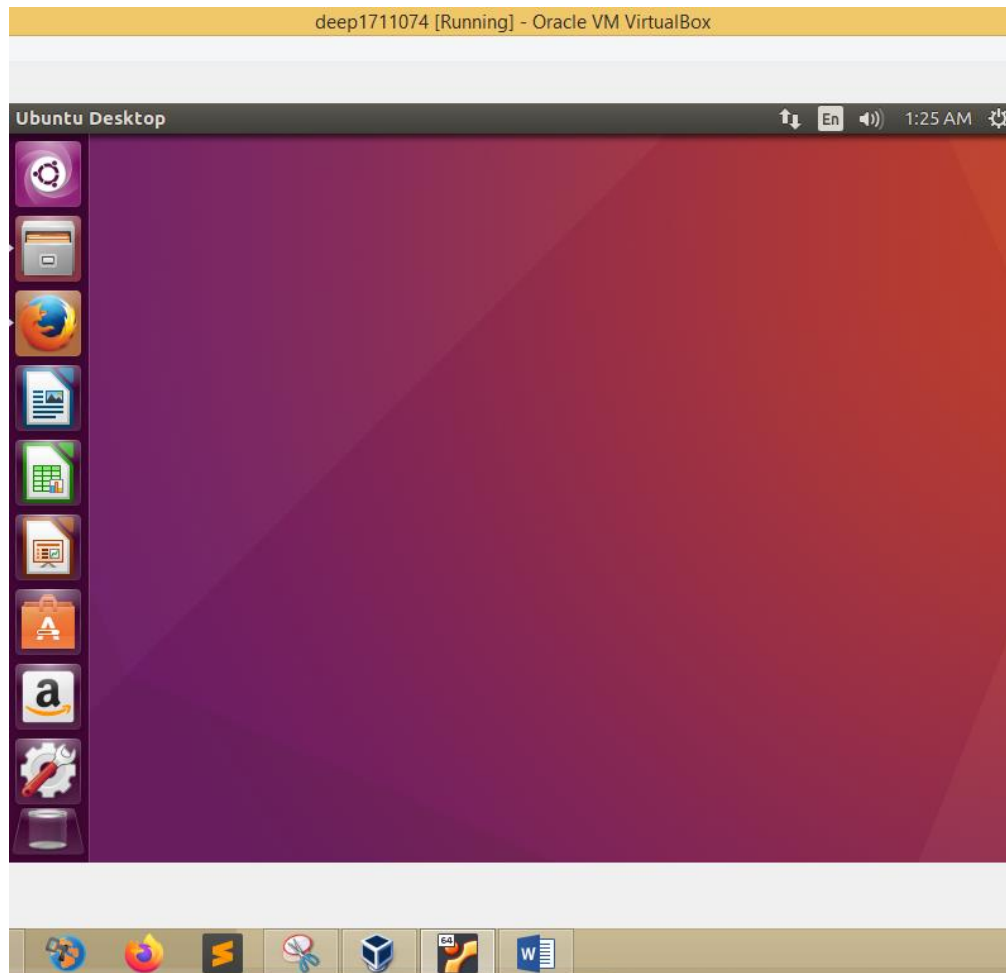
Login to your account created before installation.



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

The system is up and running.

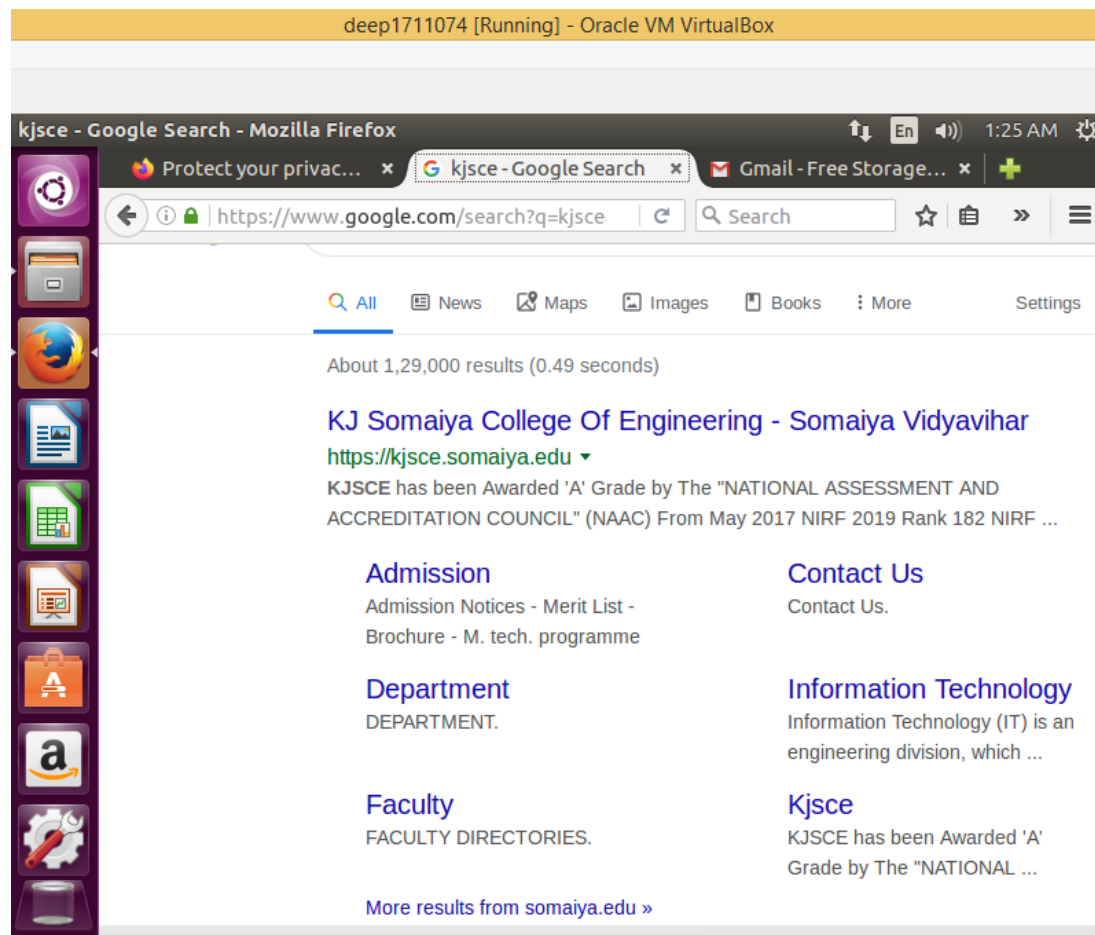


K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

To check if the system is running properly the user can access the internet.

The credentials from the main system are shared to the virtual machine.



Conclusion:

Successfully used Oracle VM Box to install Ubuntu OS on a Windows system.