Ex.No.1	INSTALLING & CREATING A VIRTUAL MACHINE USING VMWARE SOFTWARE

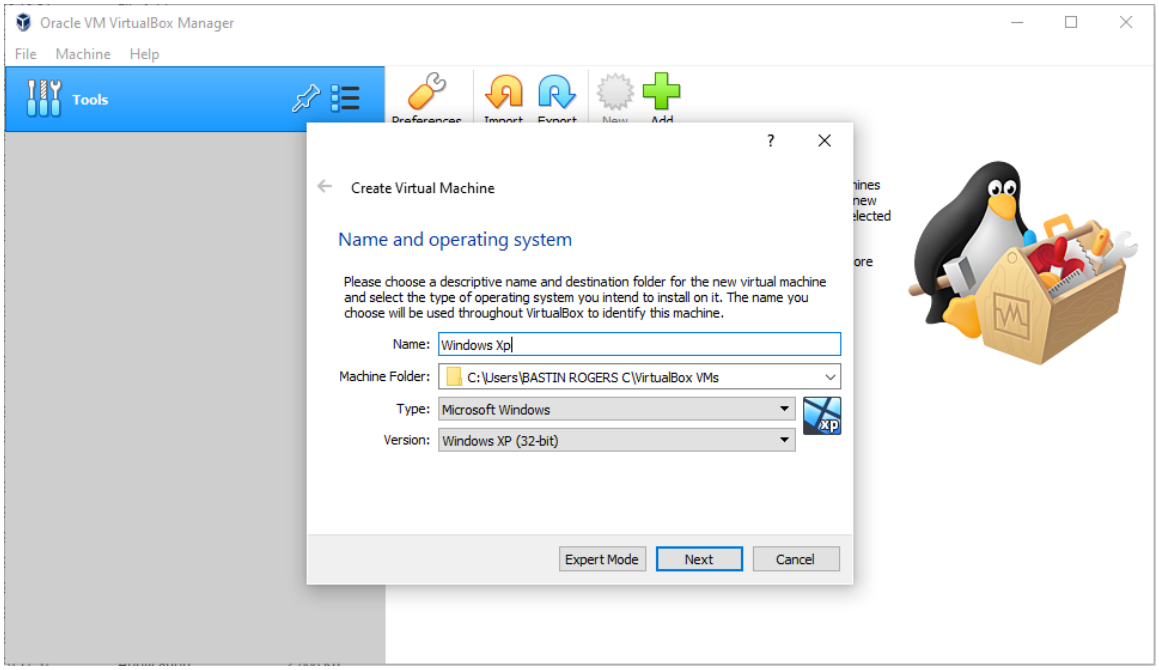
AIM:

To Install Guest OS Windows XP using Oracle Virtual Box

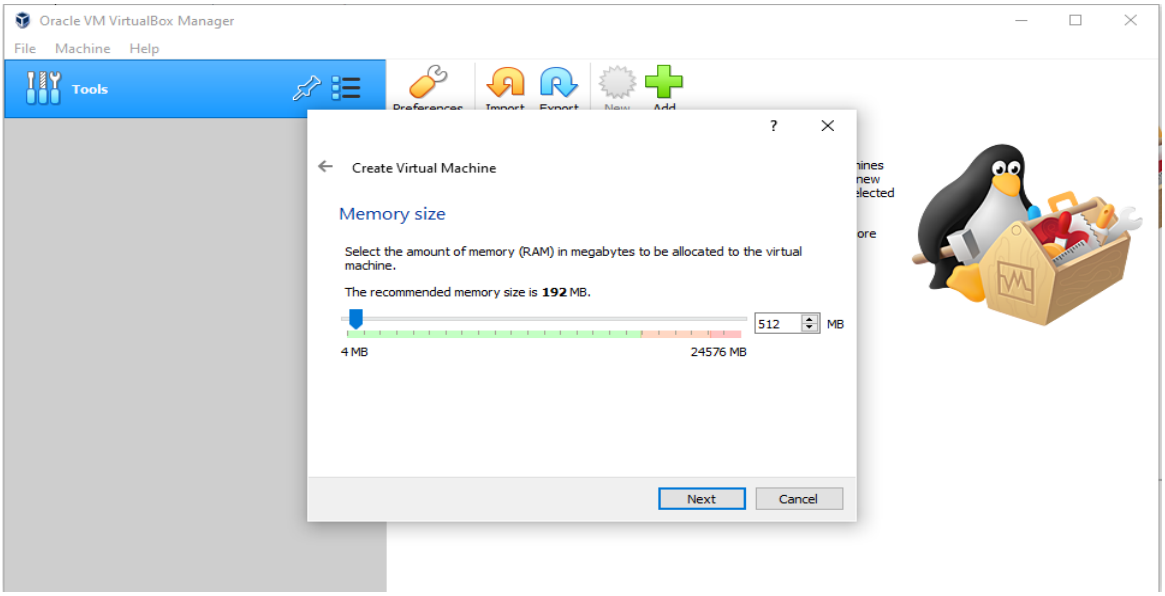
PROCEDURE:

Open the Virtual Machine Software

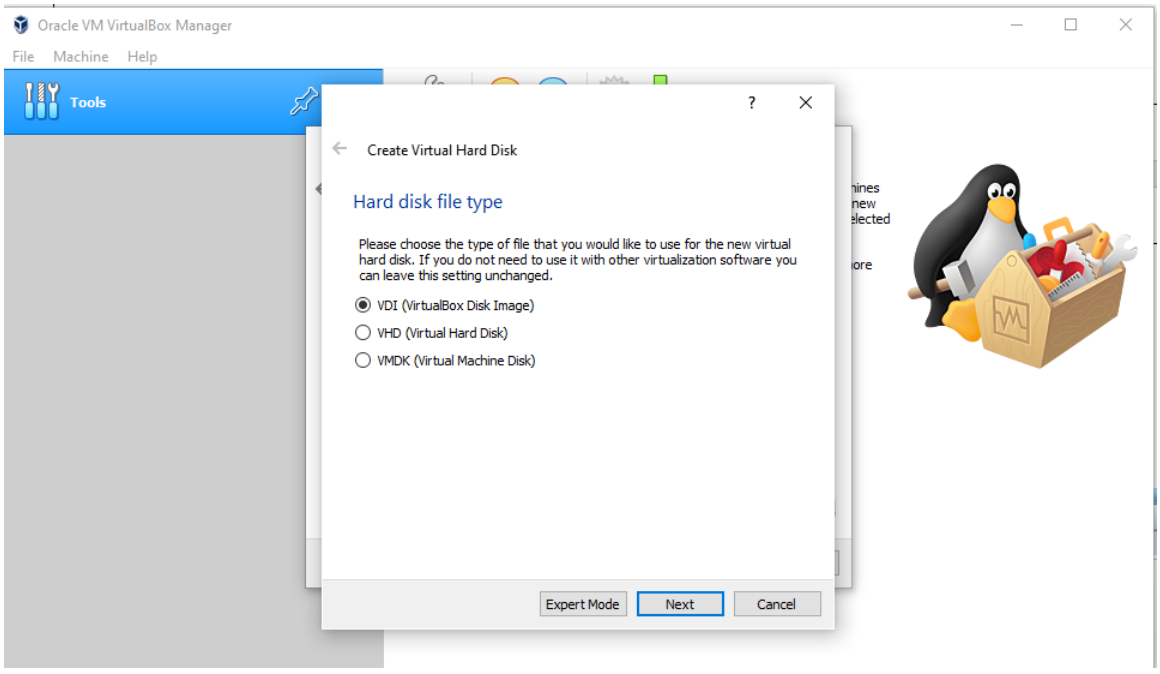
i)Click New and give the name of the Virtual Operating System you are going to install. The Virtual OS we are going to install is Windows Xp.Give the name as Windows Xp



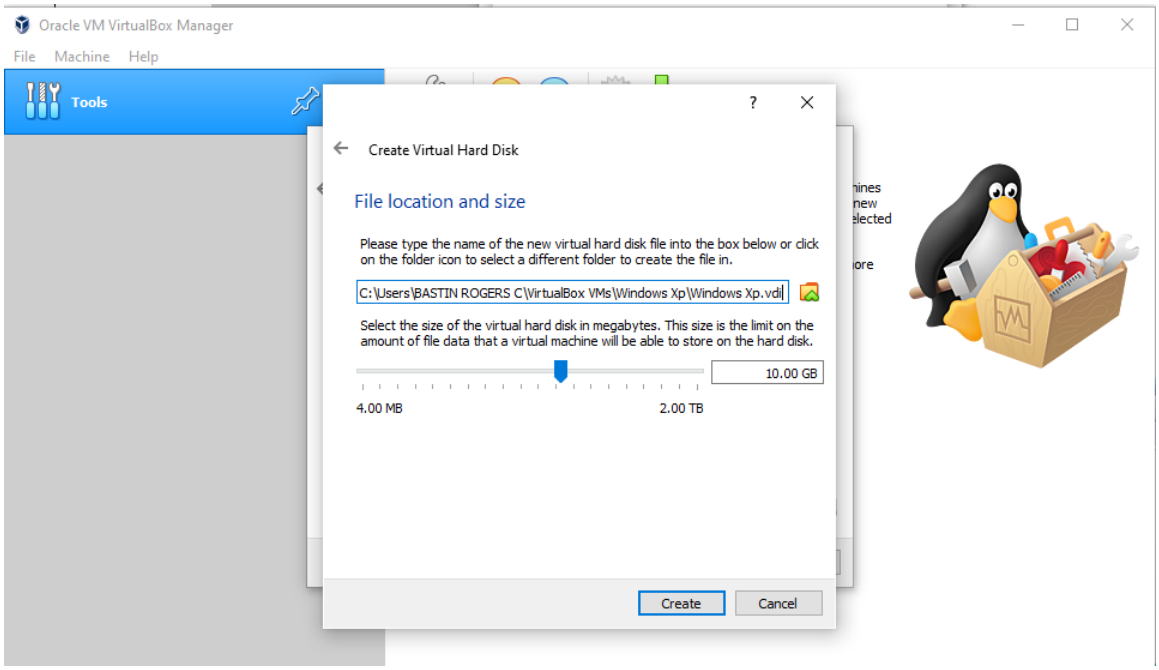
ii)Choose the Ram Capacity. Here we have allocated 512MB physical memory for Windows Xp



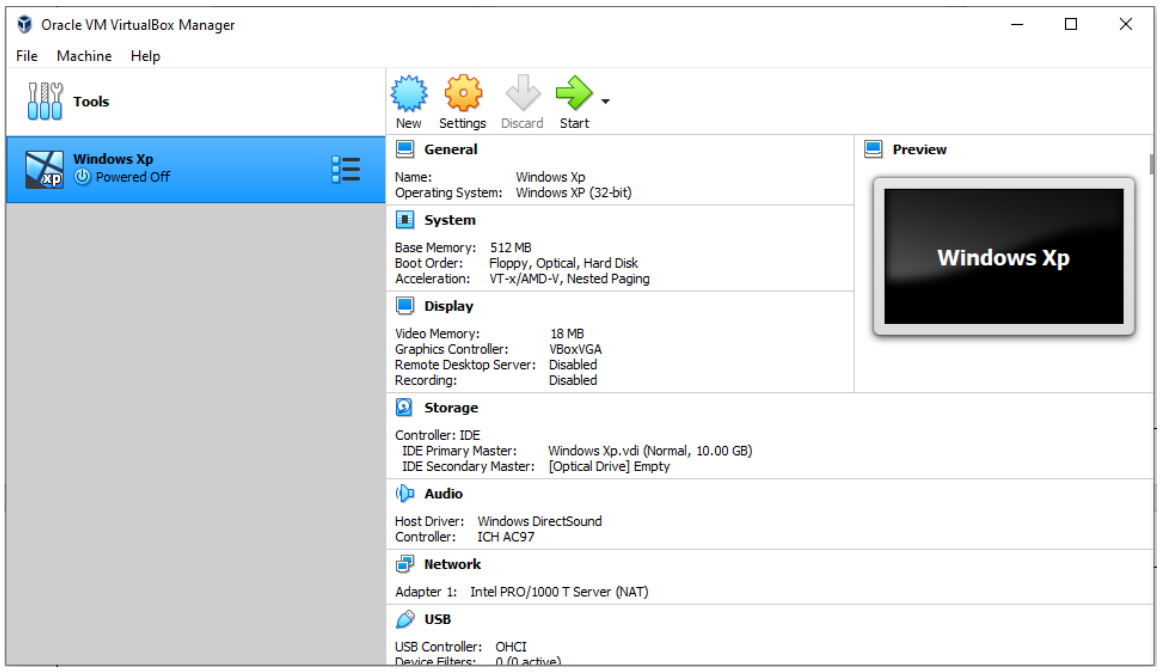
iii) Create Virtual Hard disk for the Virtual Guest OS.



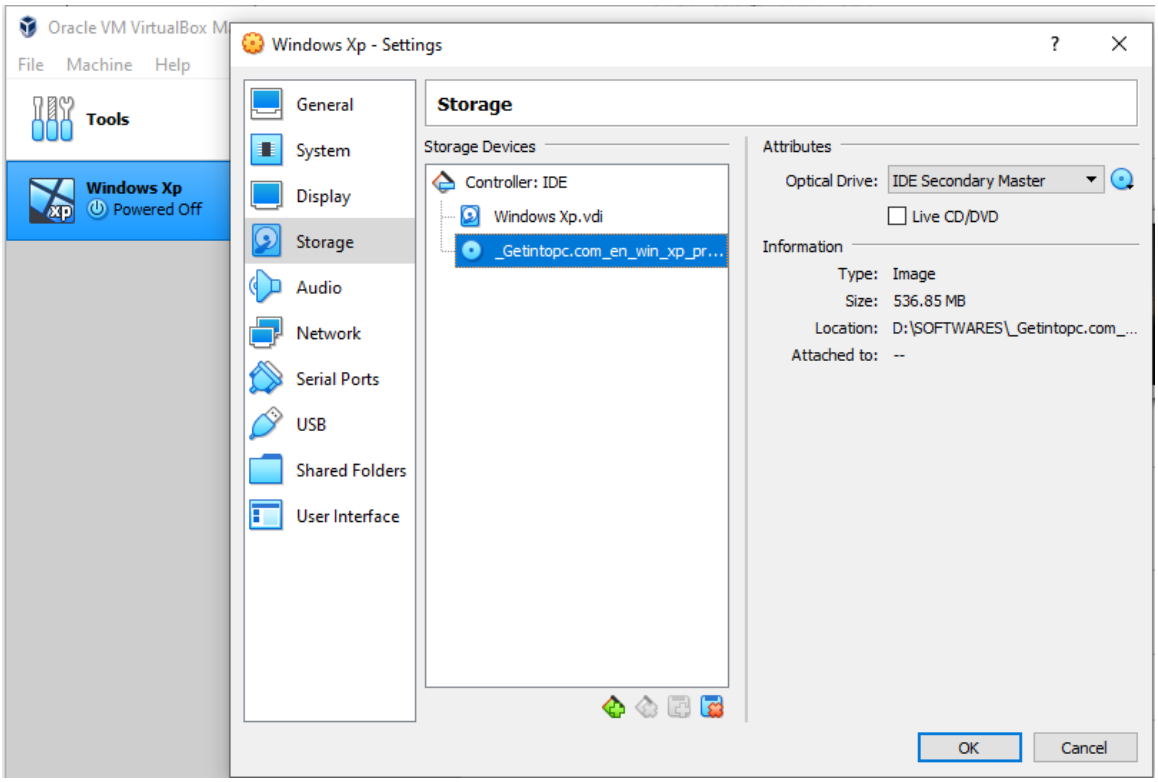
iv) Choose a Hard Disk space capacity for the Virtual OS



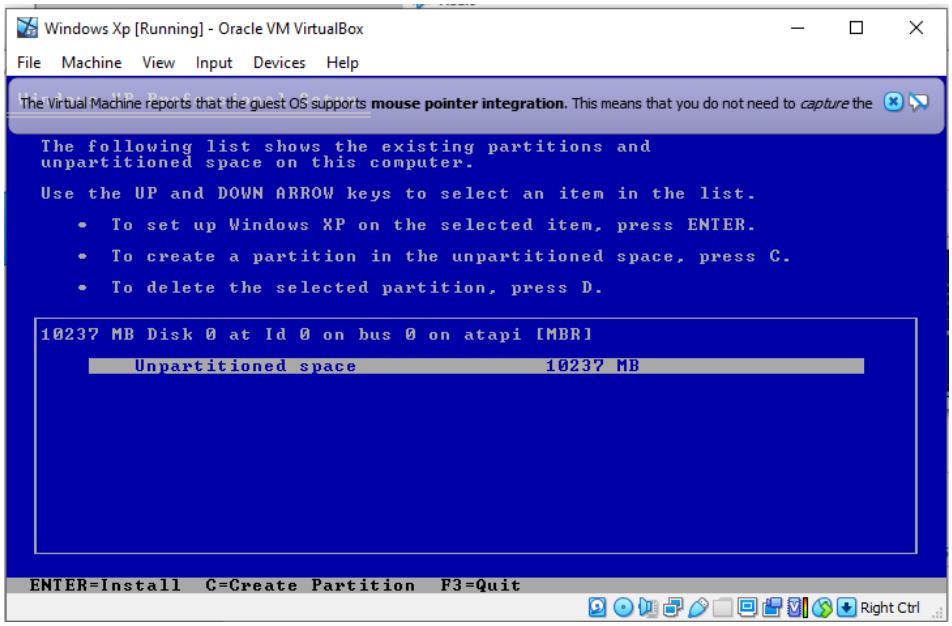
v) Click the Start Button and Select the Normal Start



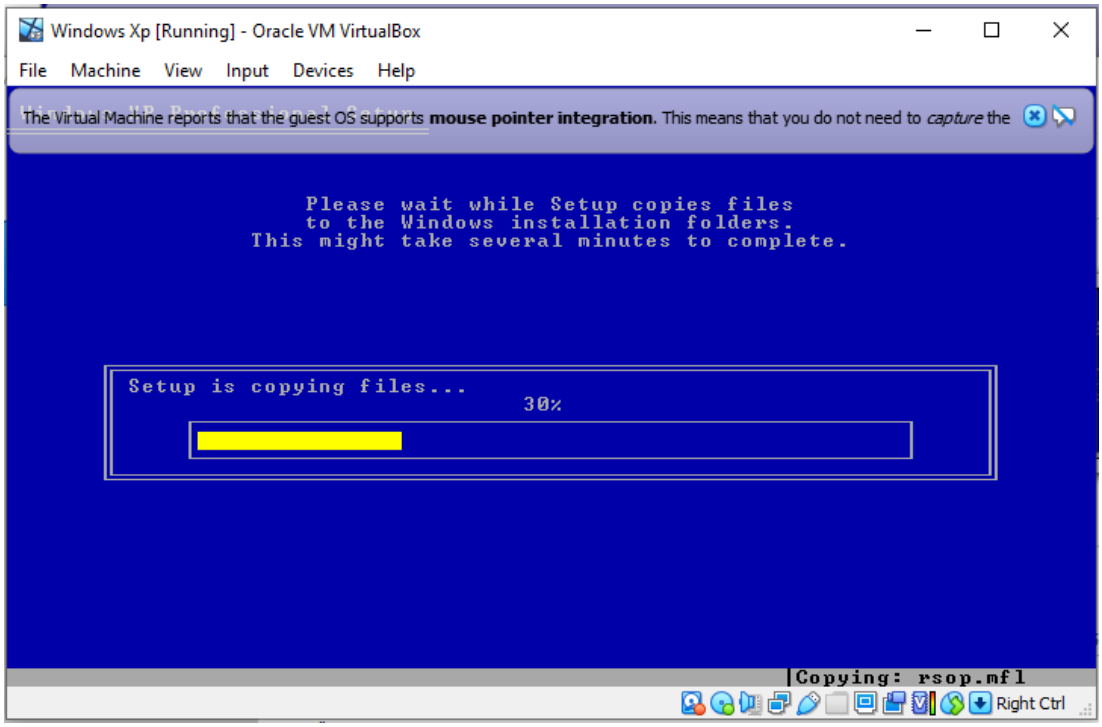
vi)Select Settings->Click Storage and add Windows xp ISO image you have downloaded



Xii) Now your Virtual OS will start to install. Click ENTER so that Virtual Hard Disk space we have created will be allocated.

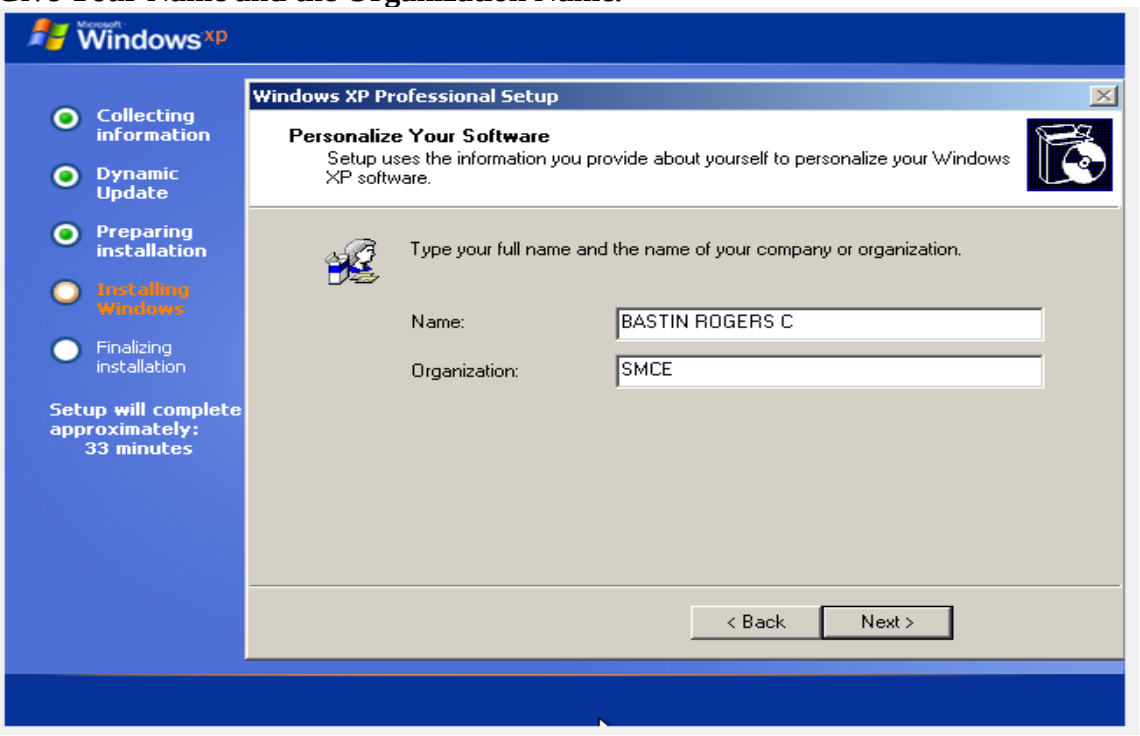


xiii) Now your Virtual OS will start to install

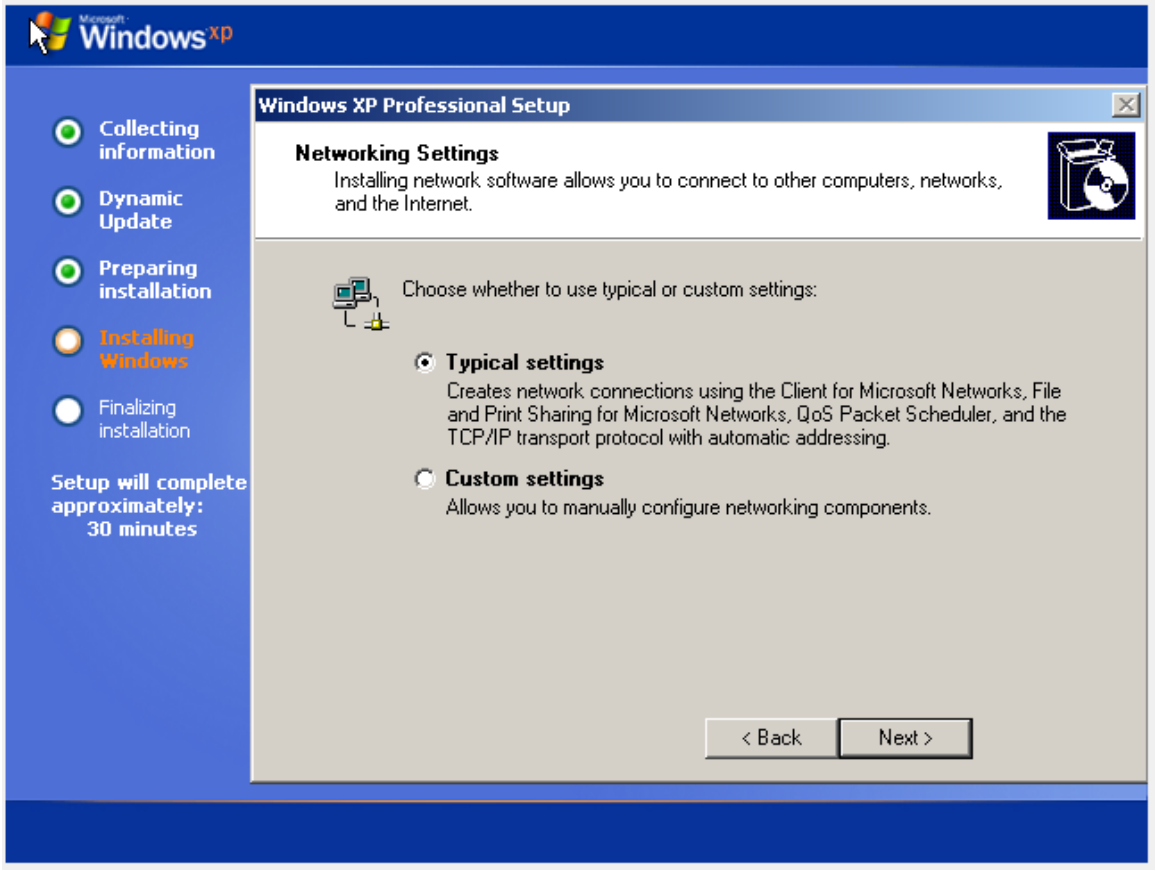


Click Next and Wait until your Windows Xp is Completely installed

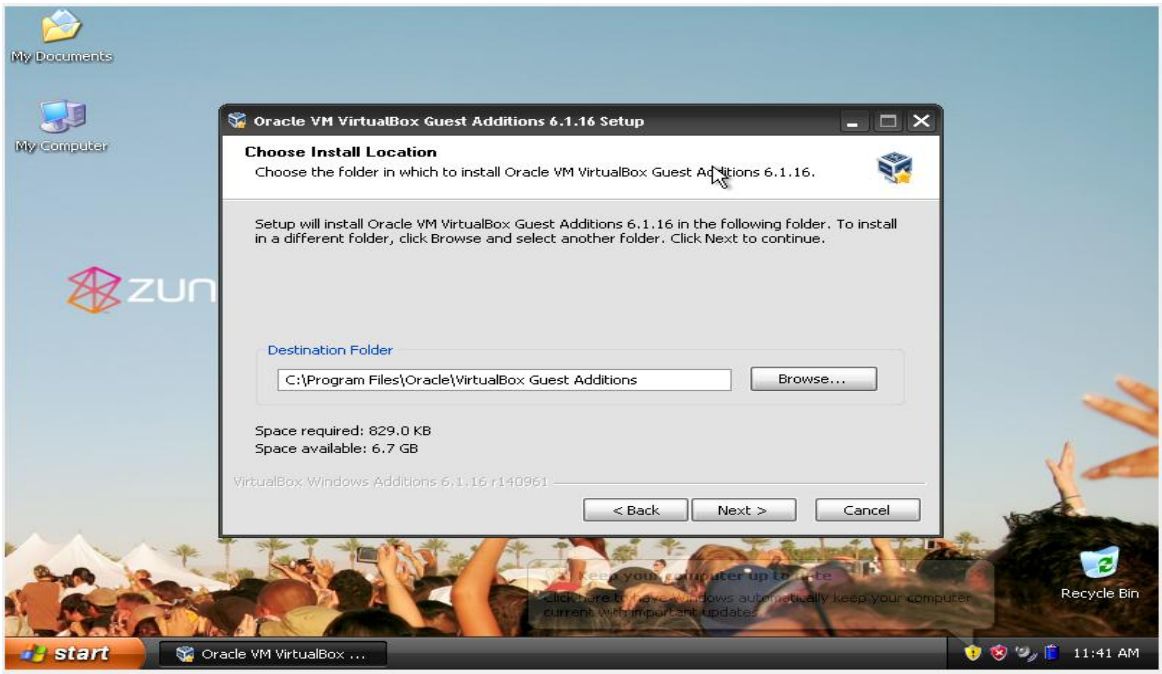
Give Your Name and the Organization Name.



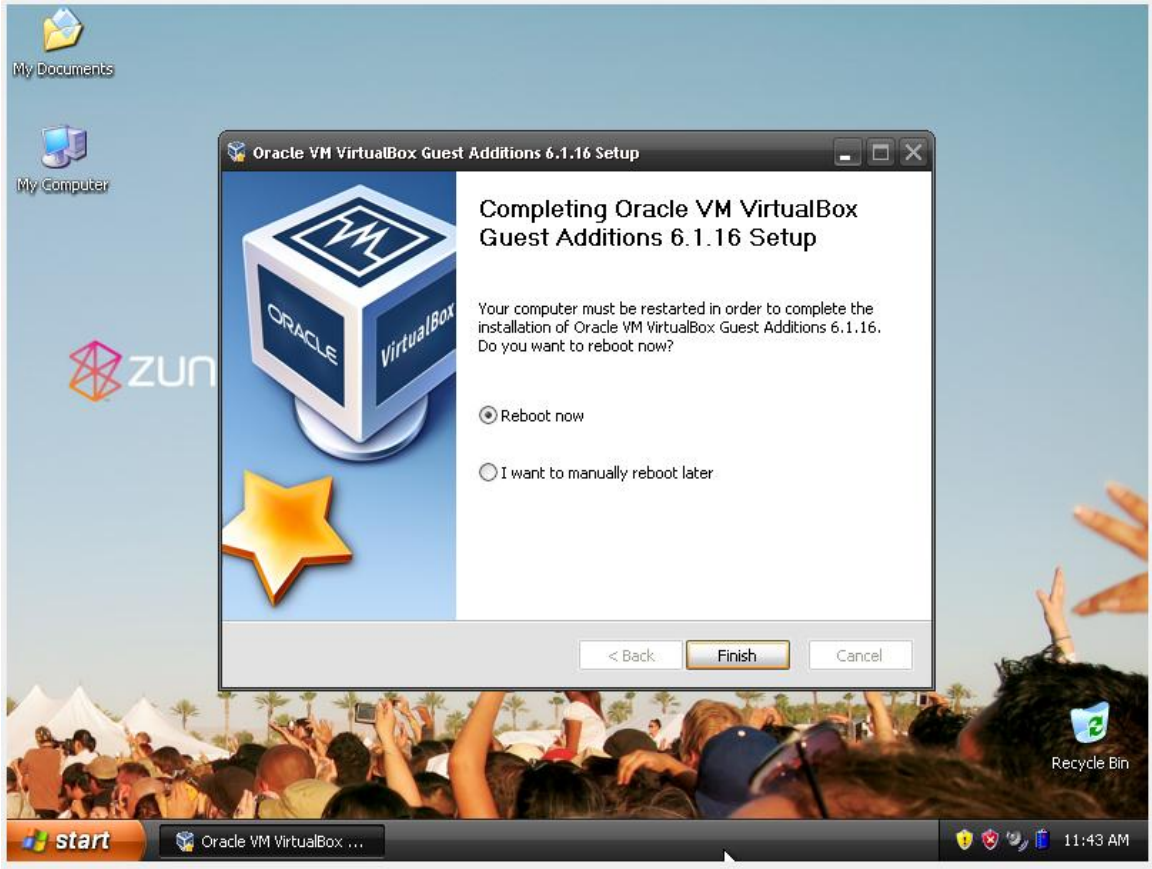
Click the Network Settings as Typical and Click next



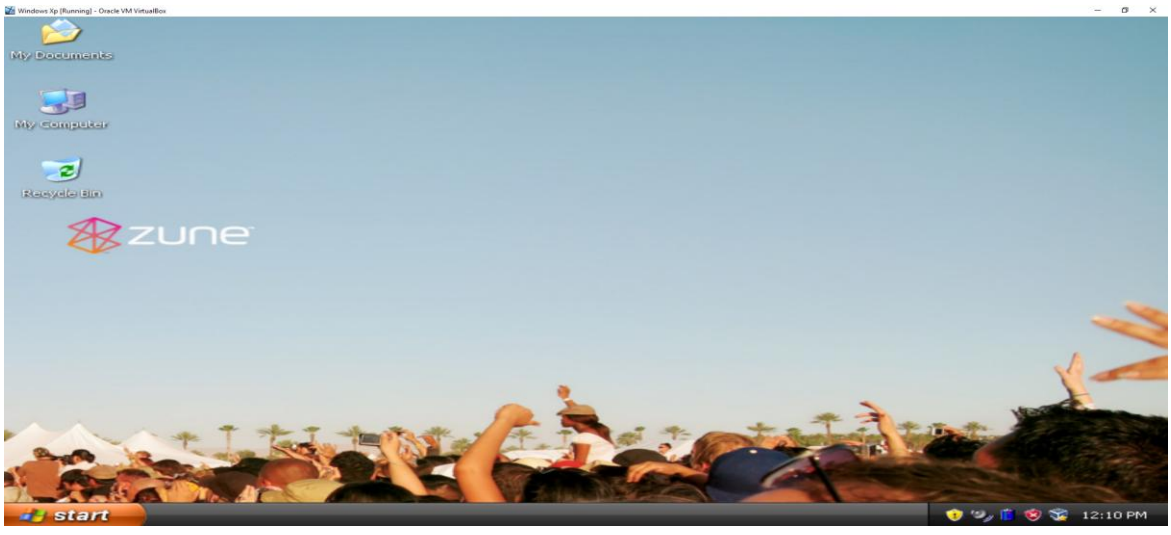
Click Devices and Install Guest Additions so that you can view your Guest OS in full screen mode



After Installing Virtual Box Guest Additions click Reboot now.



After Rebooting your system you can view your virtual OS in full screen mode



RESULT:

Thus the Guest OS Windows XP is created using Oracle Virtual Box

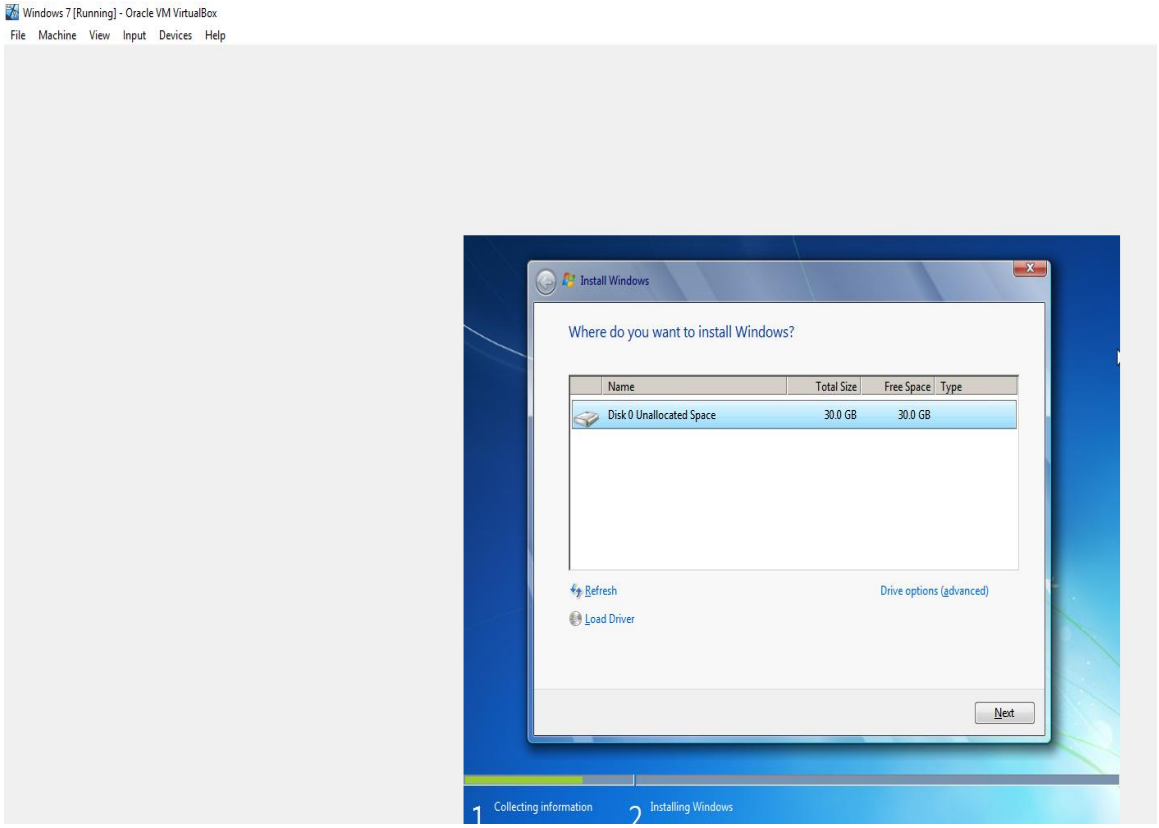
Installing Windows 7 using Oracle Virtual Box

AIM:

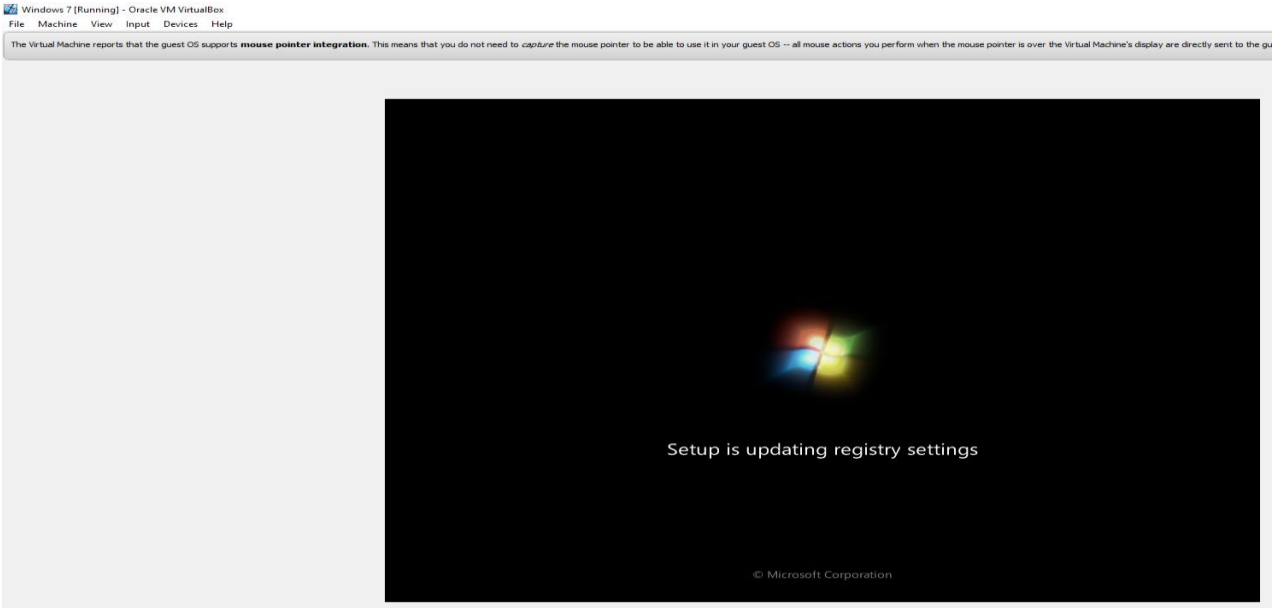
To Install an Operating System on Virtual Machine.

PROCEDURE:

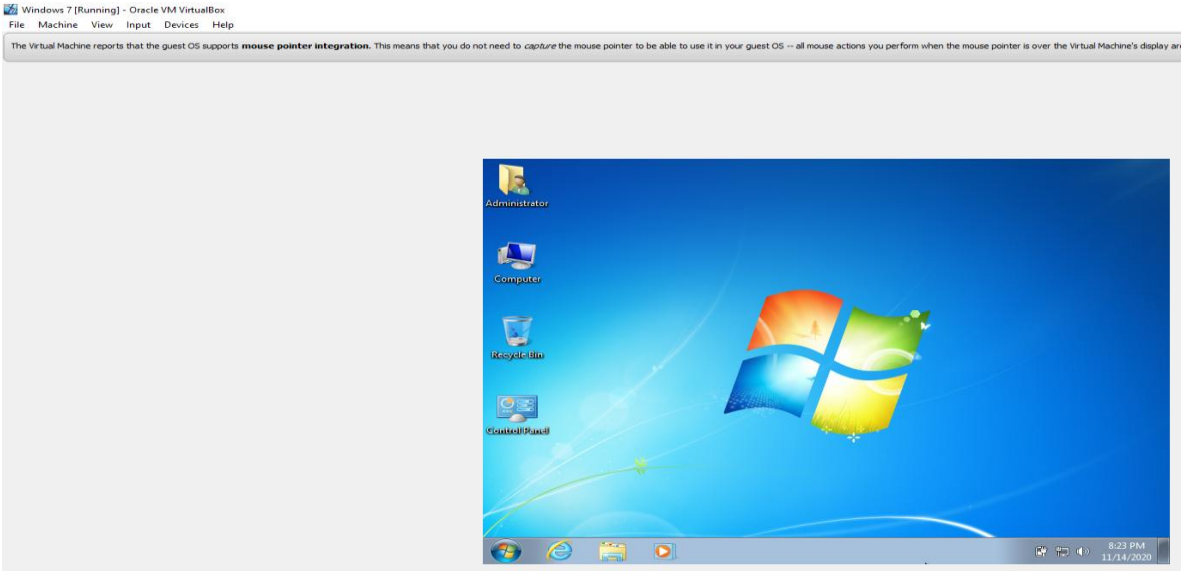
Click Next and Continue the Installation



Windows 7 will start Installing



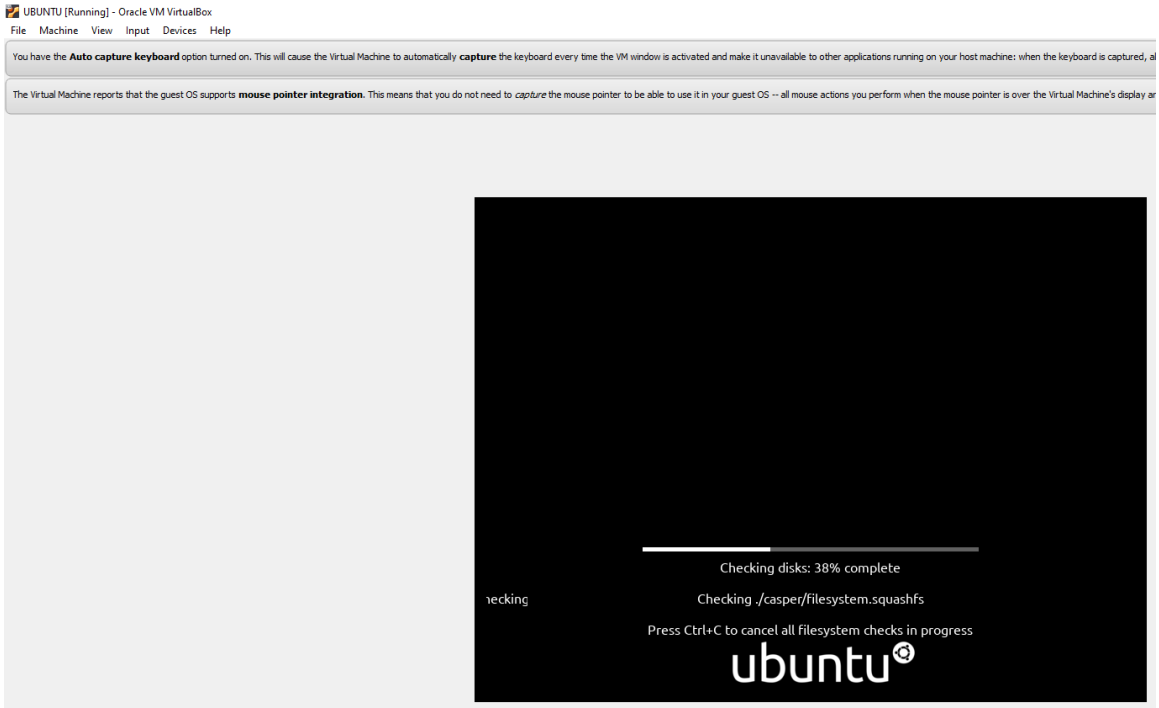
After Installing windows 7 Guest OS in Oracle Virtual Box we can run applications using this Guest OS



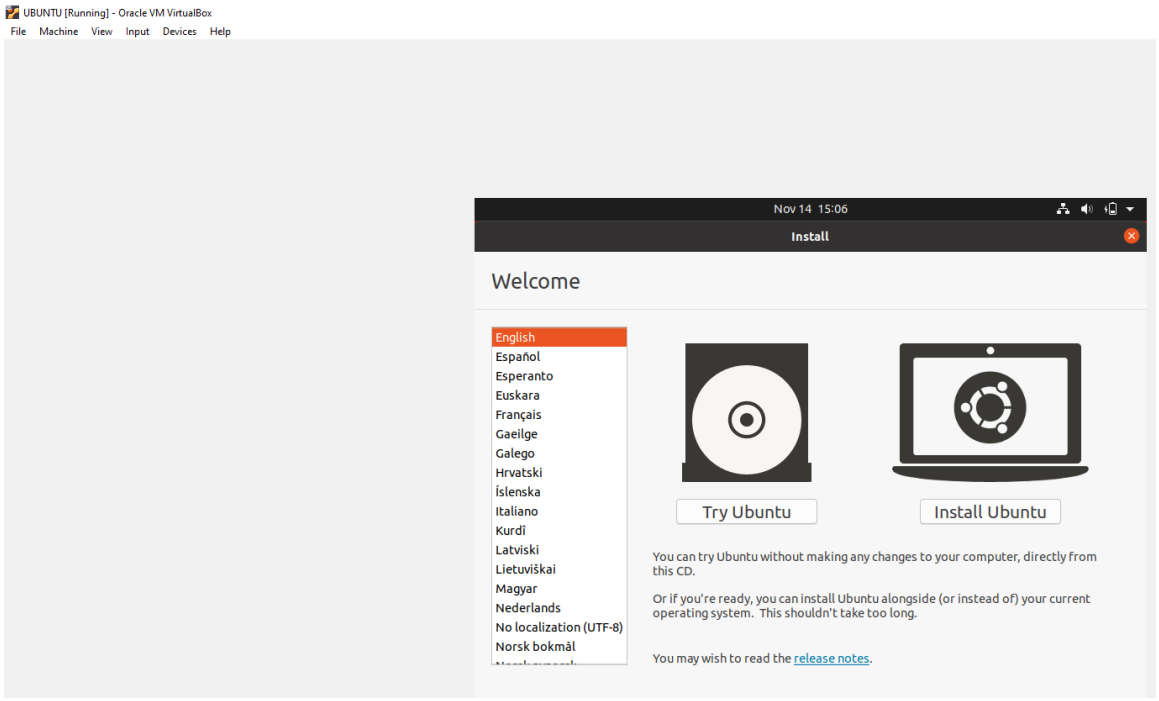
iii)Installing Ubuntu 20.04 using Oracle Virtual Box

Aim

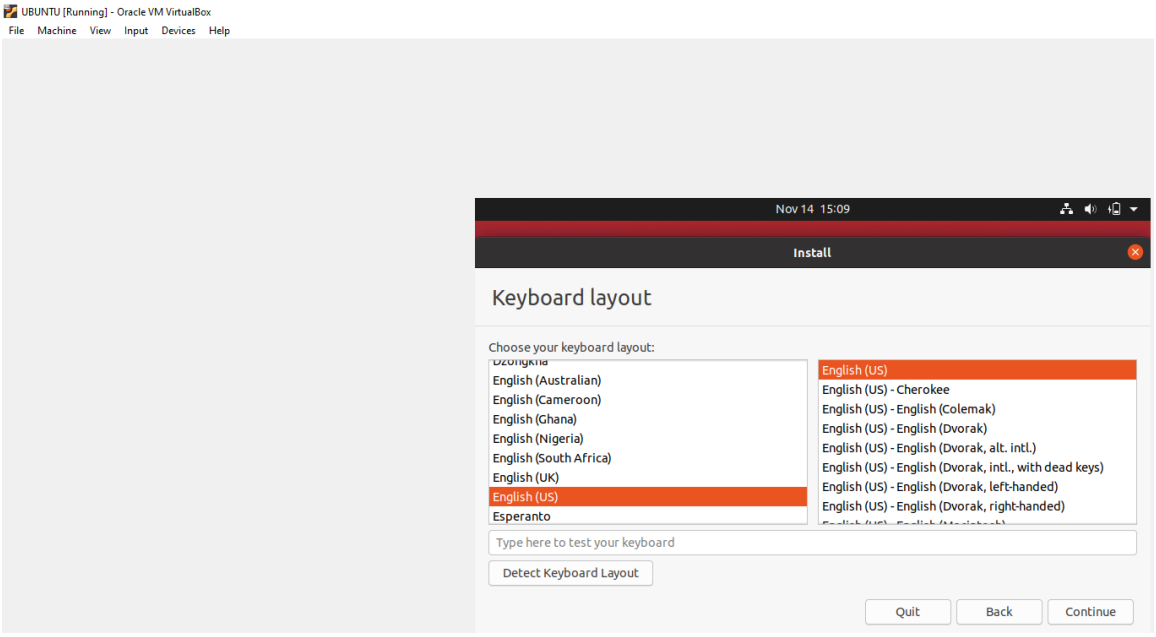
To install Guest OS Ubuntu 20.04 using Oracle Virtual Box



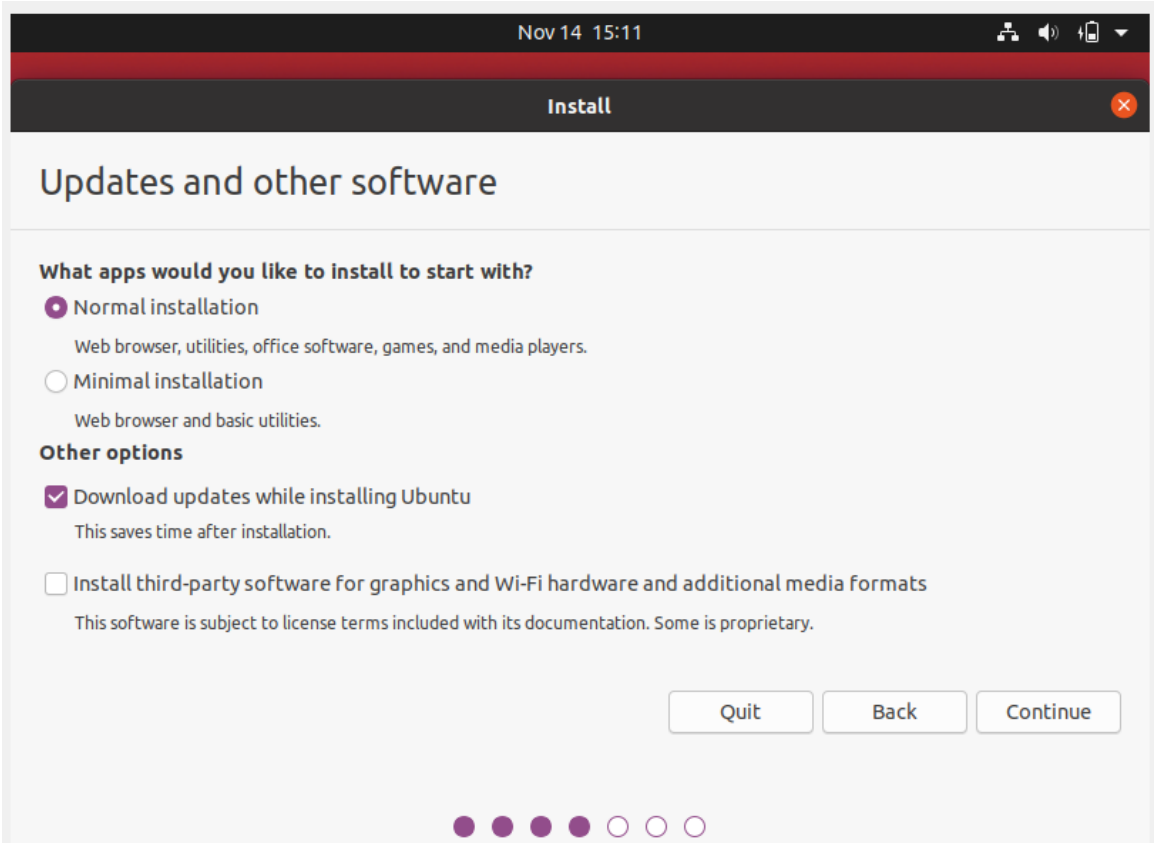
Click Install Ubuntu so that Ubuntu will start installing.



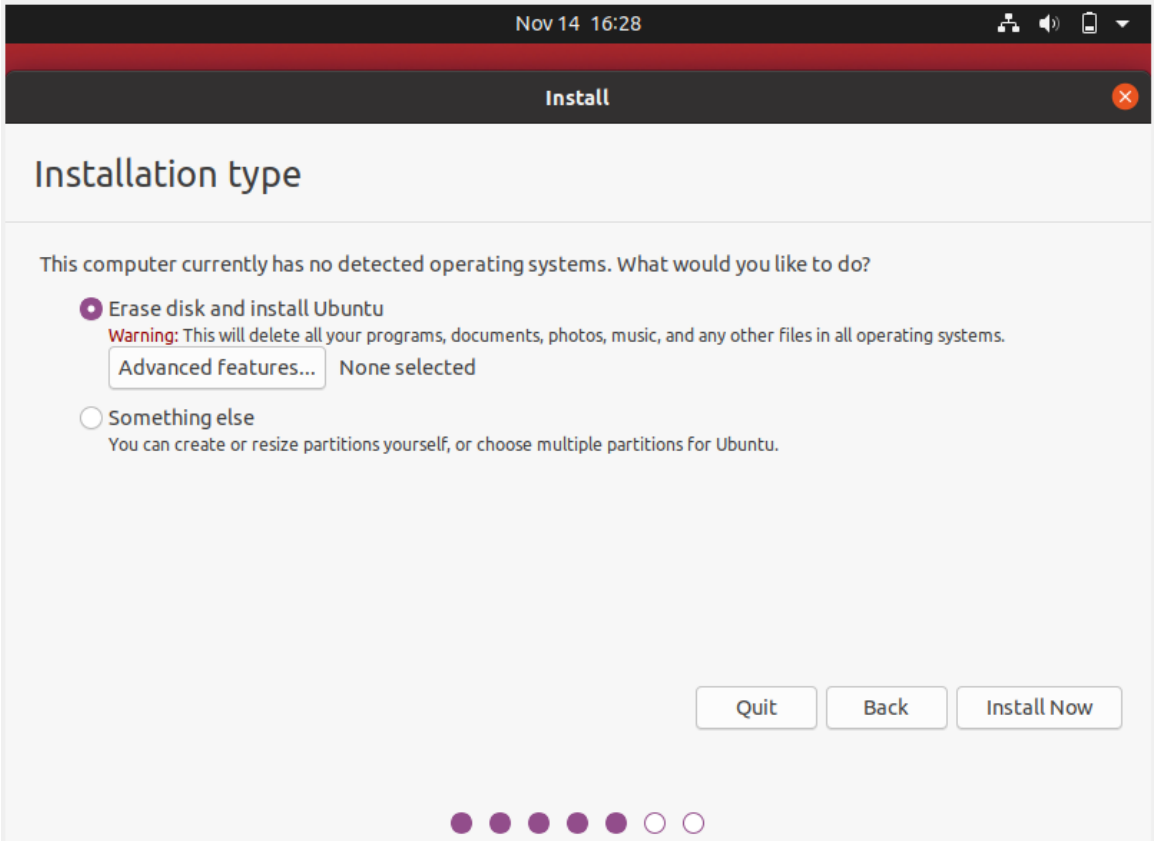
Select language English and Click Continue



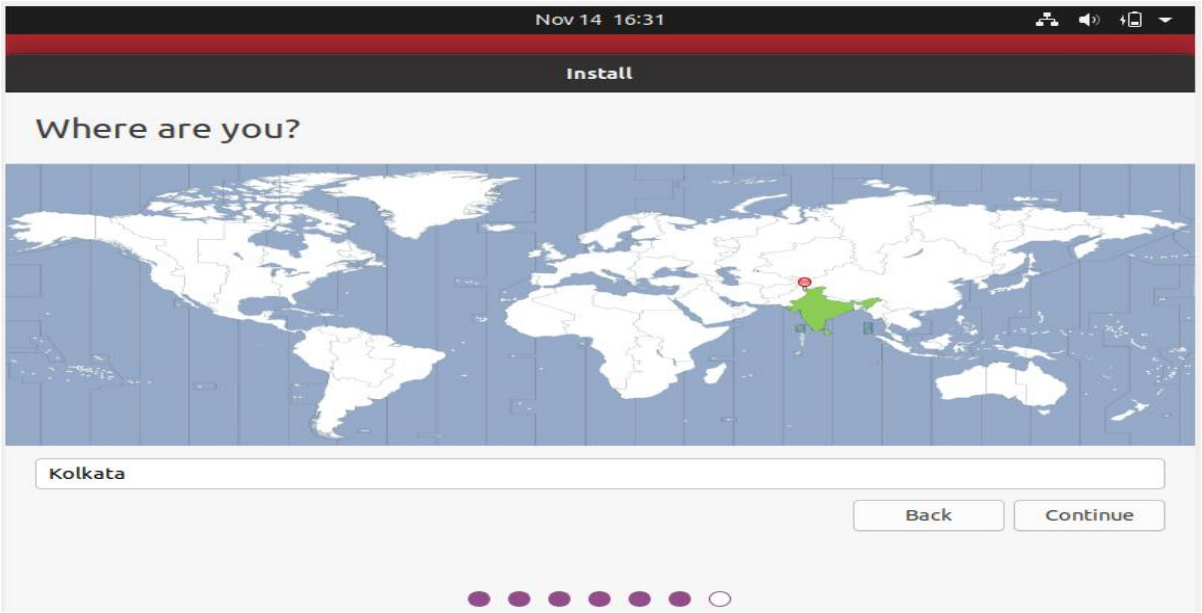
Select Normal Installation and click conti



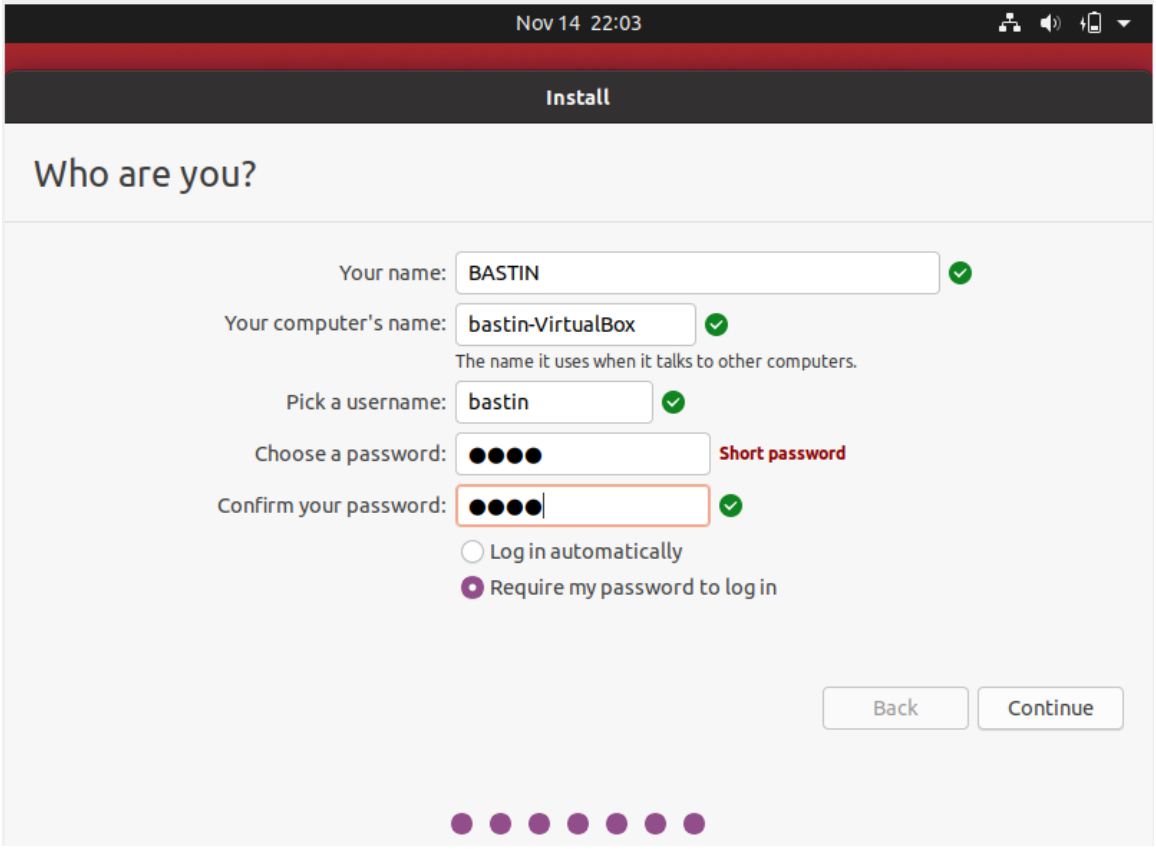
Select Erase disk and install Ubuntu and click Install Now



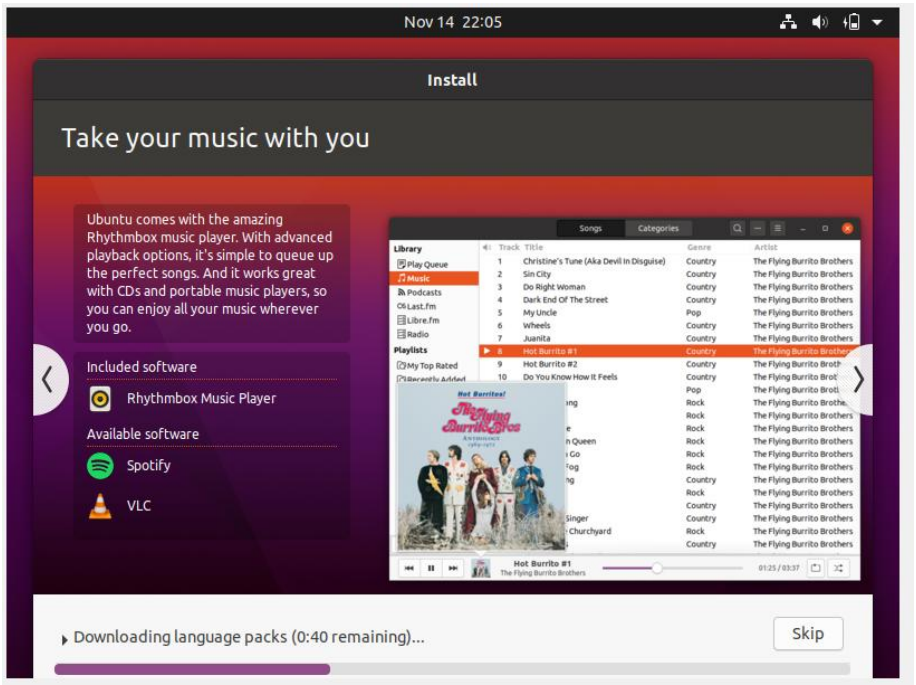
Select the Location and Click Continue



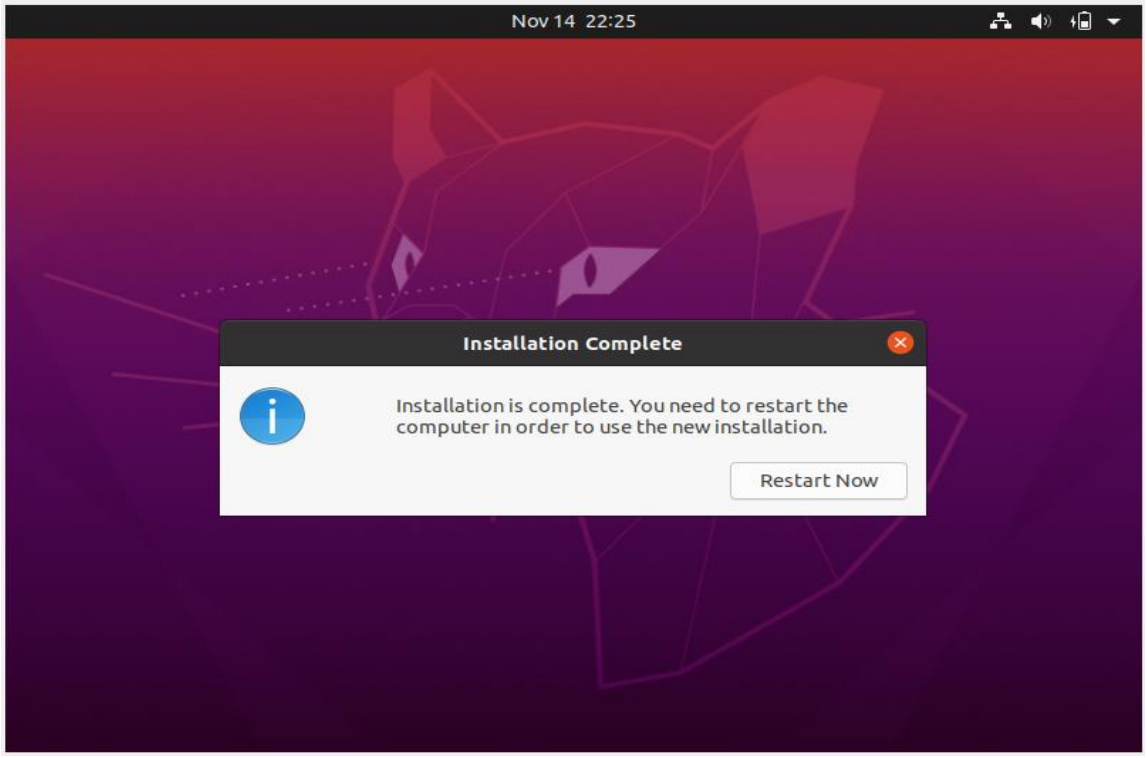
Give your Name and Password then click Continue



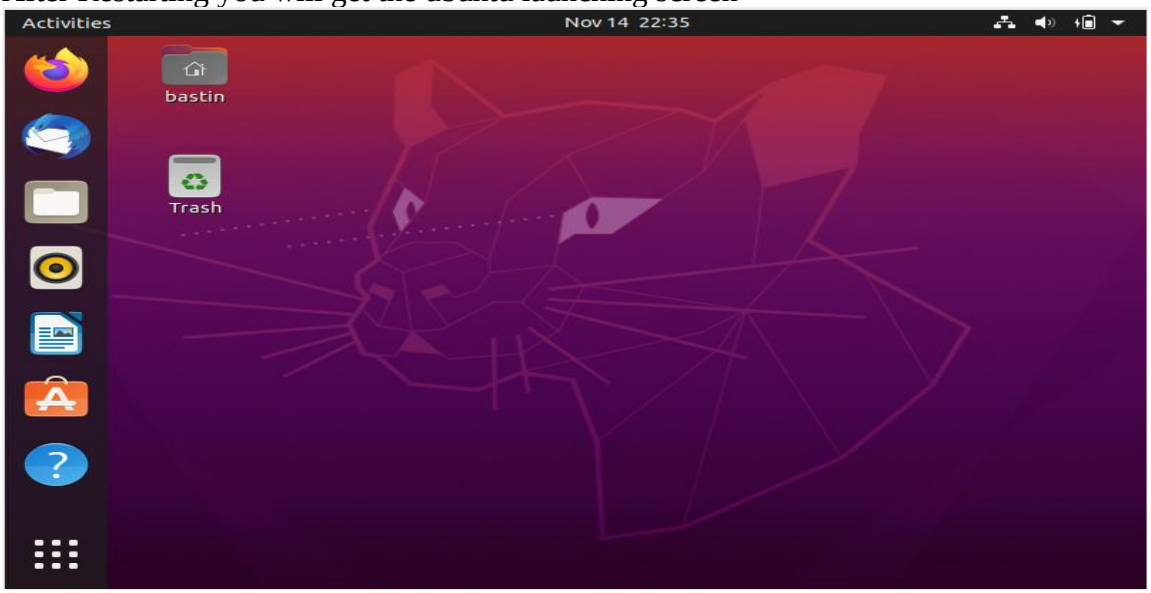
Launch Ubuntu once the installation gets completed



After installation get over click Restart Now and Launch Ubuntu Virtual OS



After Restarting you will get the ubuntu launching screen



Result

Thus, we can install different flavors of Linux and Windows using Oracle Virtual Box

Ex.No.2	Install a C compiler on Virtual Machine and execute a simple C program

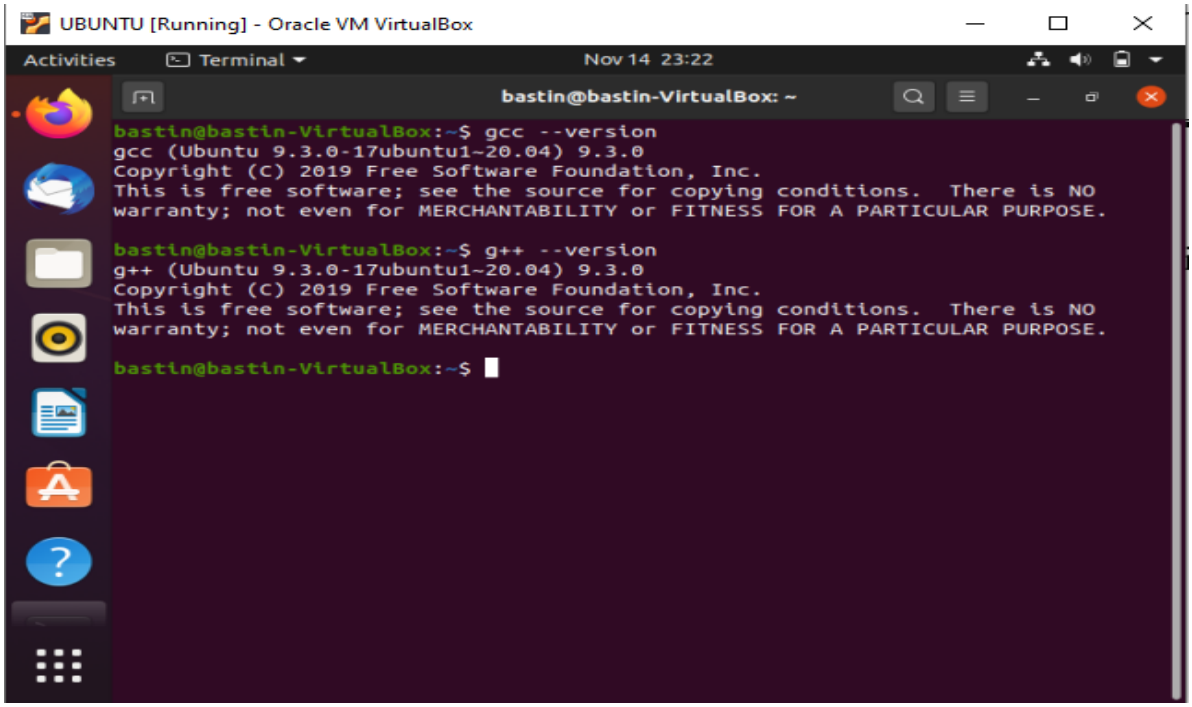
Aim :

To develop a C program using compiler in the virtual machine.

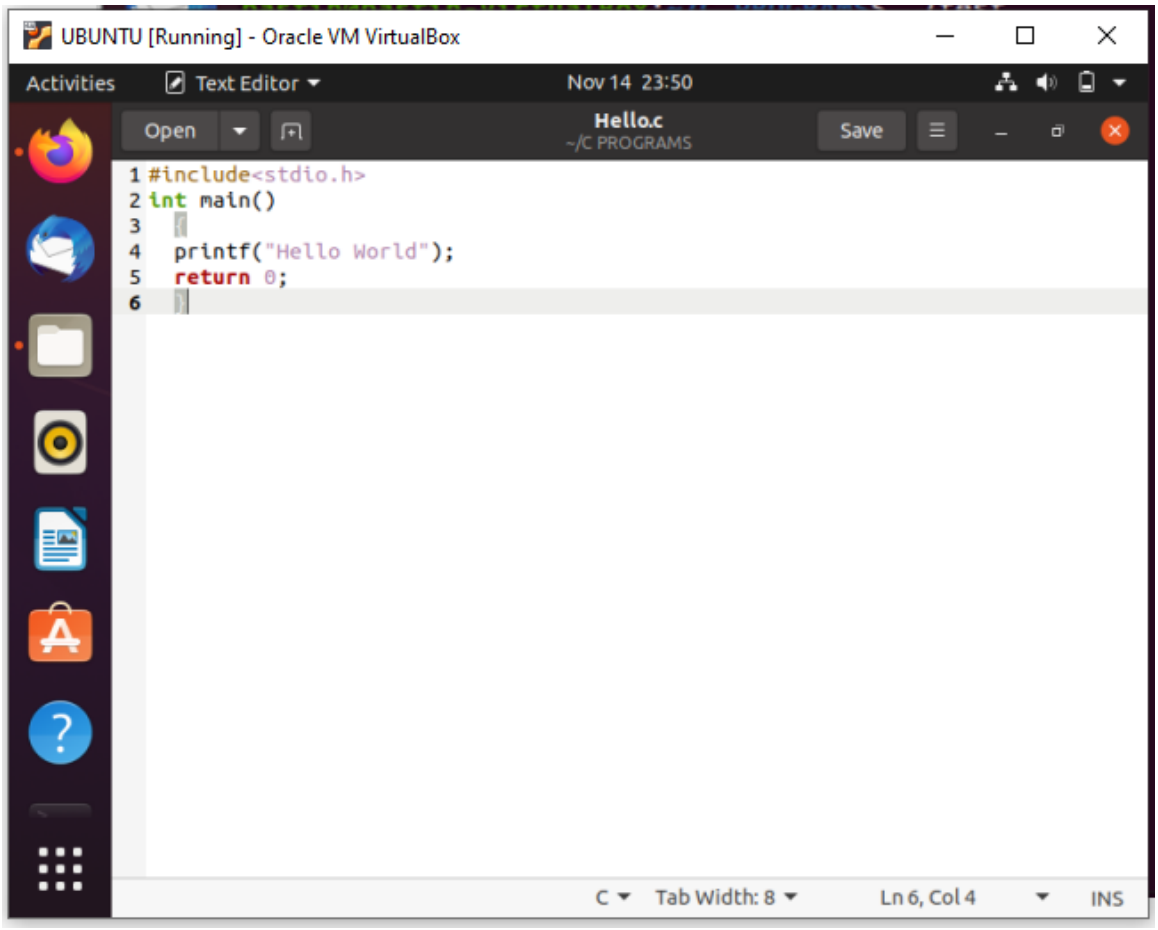
Algorithm:

1. Open terminal and type the command touch Hello.c
2. Save the file
3. Compile the program using gcc hello.c -o test
4. Run it using ./test

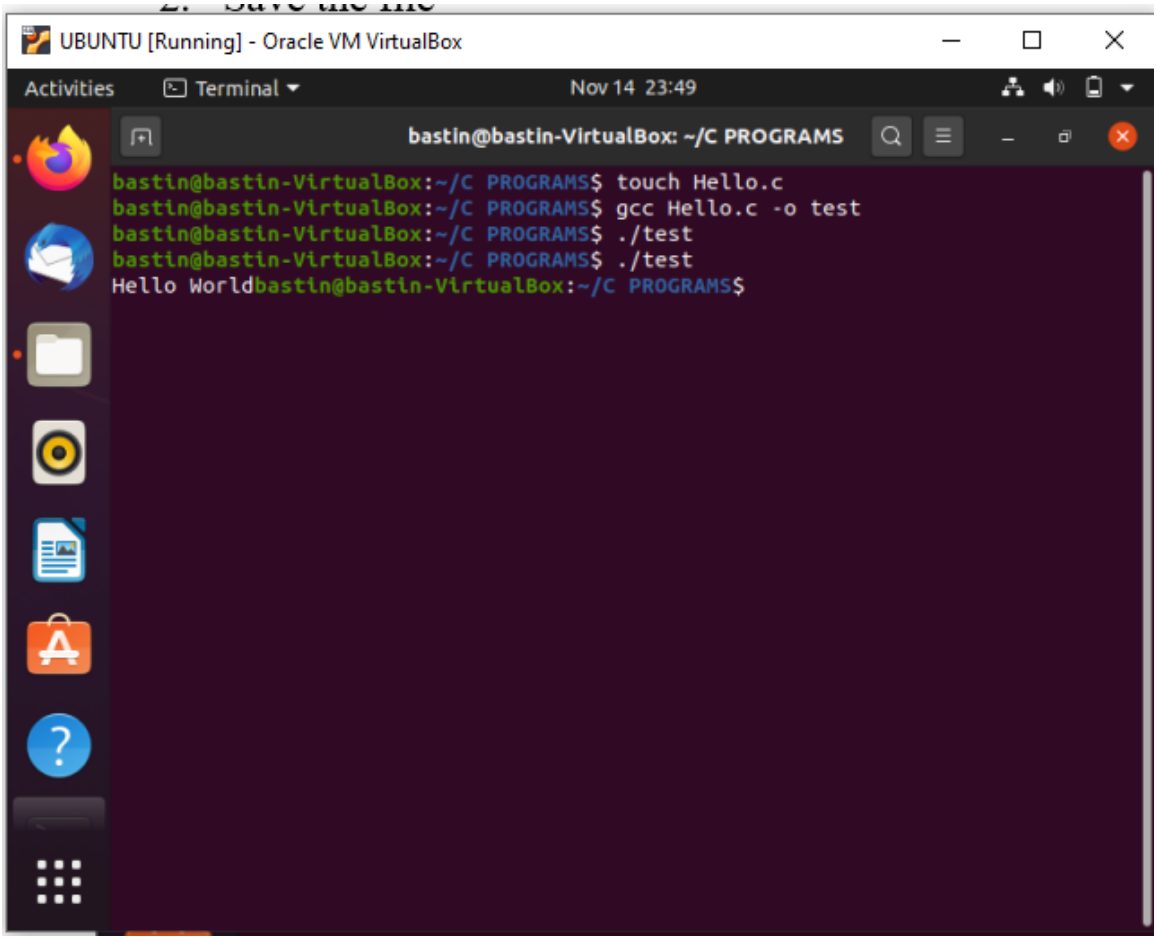
Checking gcc and g++ compiler after installation by typing gcc –version and g++ --version command in Terminal



Simple example program:



Compiling and Running C programs



Result:

Thus, the above C program was developed using in C compiler in the virtual machine application executed successfully.

Ex.No.3	Install Google App Engine. Create hello world app and other simple web applications using python/java.

Aim

To install GAE and creating simple Hello World applications using GAE

Procedure:

This document describes the installation of the Google App Engine Software Development Kit (SDK) on a Microsoft Windows and running a simple "hello world" application.

The App Engine SDK allows you to run Google App Engine Applications on your local computer. It simulates the run---time environment of the Google App Engine infrastructure.

Pre-Requisites: Python 2.5.4

If you don't already have Python 2.5.4 installed in your computer, download and Install Python 2.5.4 from:

http://www.python.org/download/releases/2.5.4/

Download and Install

You can download the Google App Engine SDK by going to:

http://code.google.com/appengine/downloads.html

and download the appropriate install package.

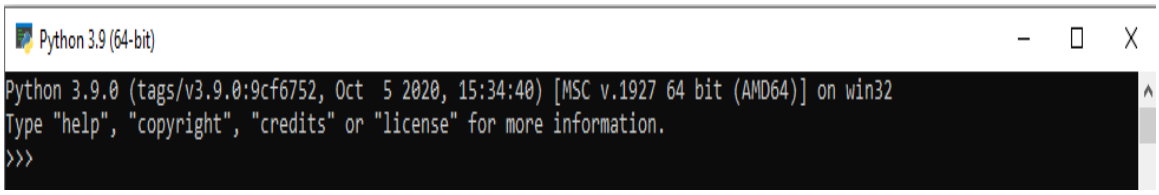
Download the Google App Engine SDK

Before downloading, please read the Terms that govern your use of the App Engine SDK.

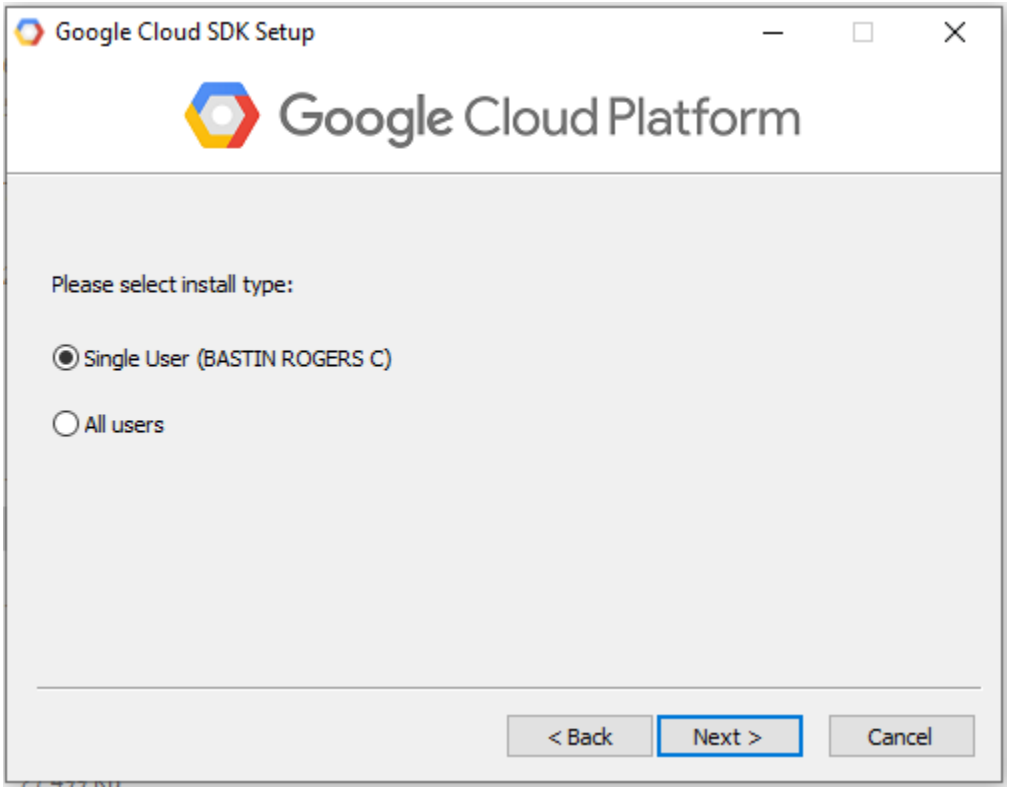
Please note: The App Engine SDK is under **active development**, please keep this in mind as you explore its capabilities. See the SDK Release Notes for the information on the most recent changes to the App Engine SDK. If you discover any issues, please feel free to notify us via our Issue Tracker.

Platform	Version	Package	Size	SHA1 Checksum
Windows	1.1.5 - 10/03/08	GoogleAppEngine_1.1.5.msi	2.5 MB	e974312b4aefc0b3873ff0d93eb4c525d5e88c30
Mac OS X	1.1.5 - 10/03/08	GoogleAppEngineLauncher-1.1.5.dmg	3.6 MB	f62208ac01c1b3e39796e58100d5f1b2f052d3e7
Linux/Other Platforms	1.1.5 - 10/03/08	google_appengine_1.1.5.zip	2.6 MB	cbb9ce817bdabf1c4f181d9544864e55ee253de1

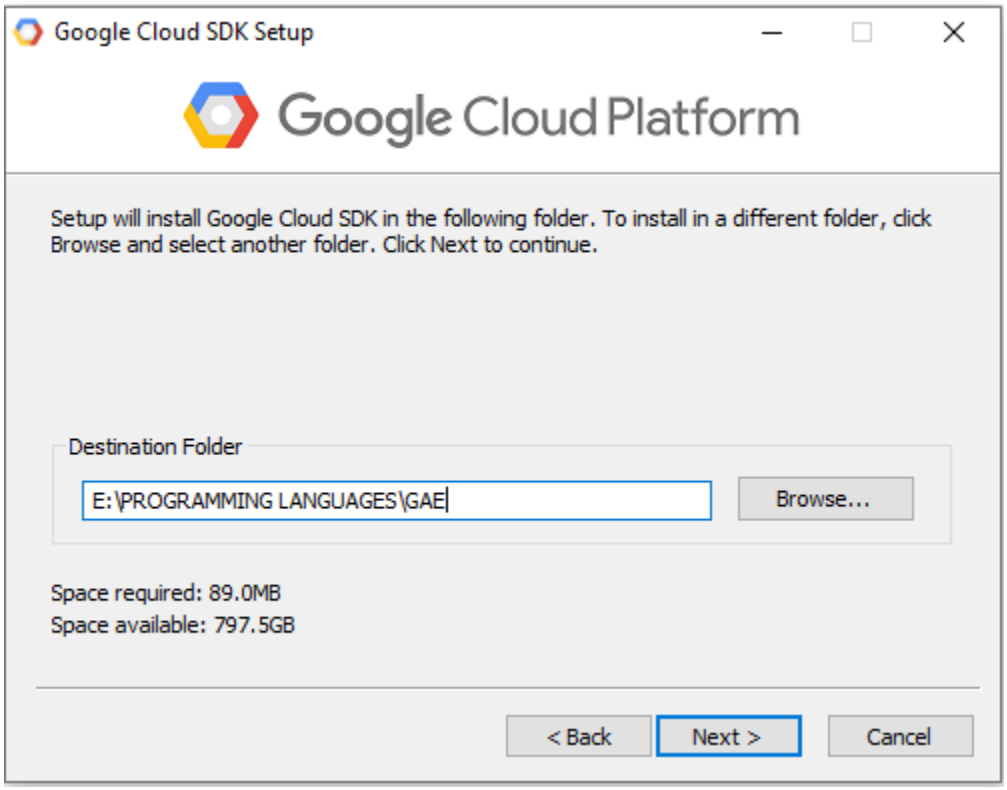
Install Python and check whether it is working correctly or not



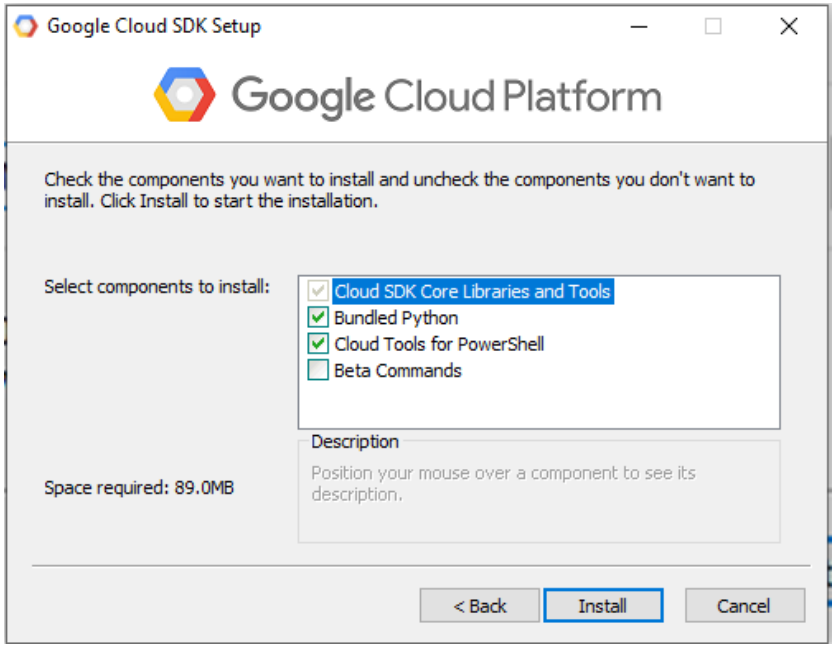
GAE installation steps:

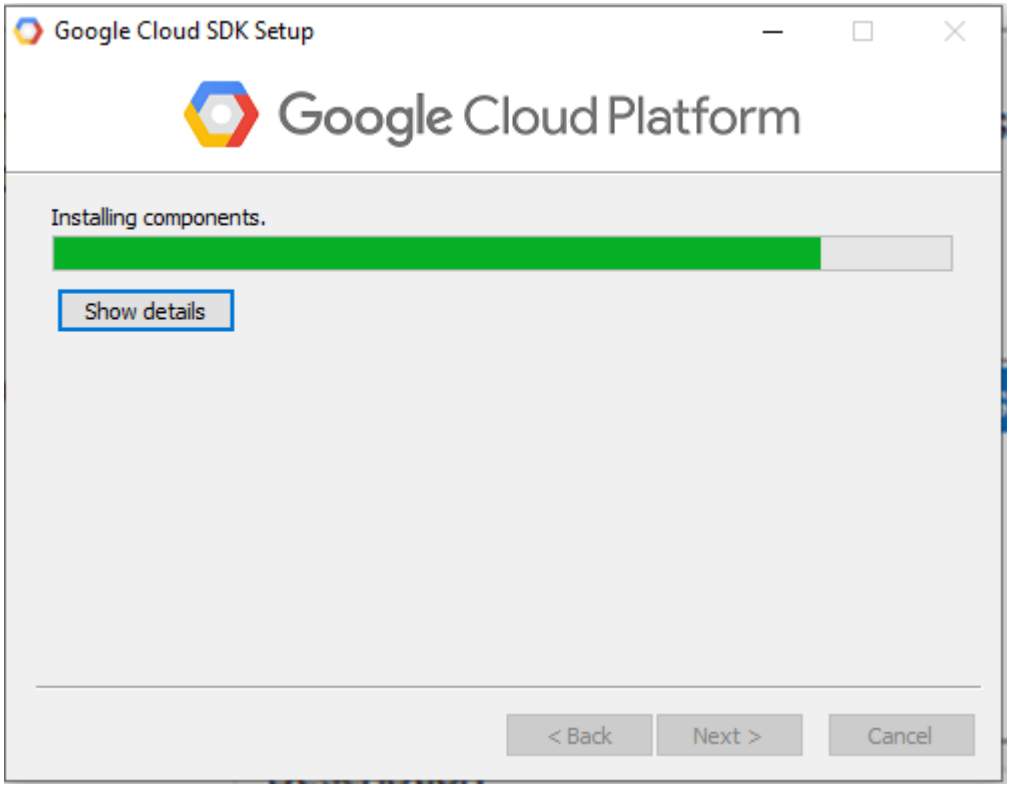


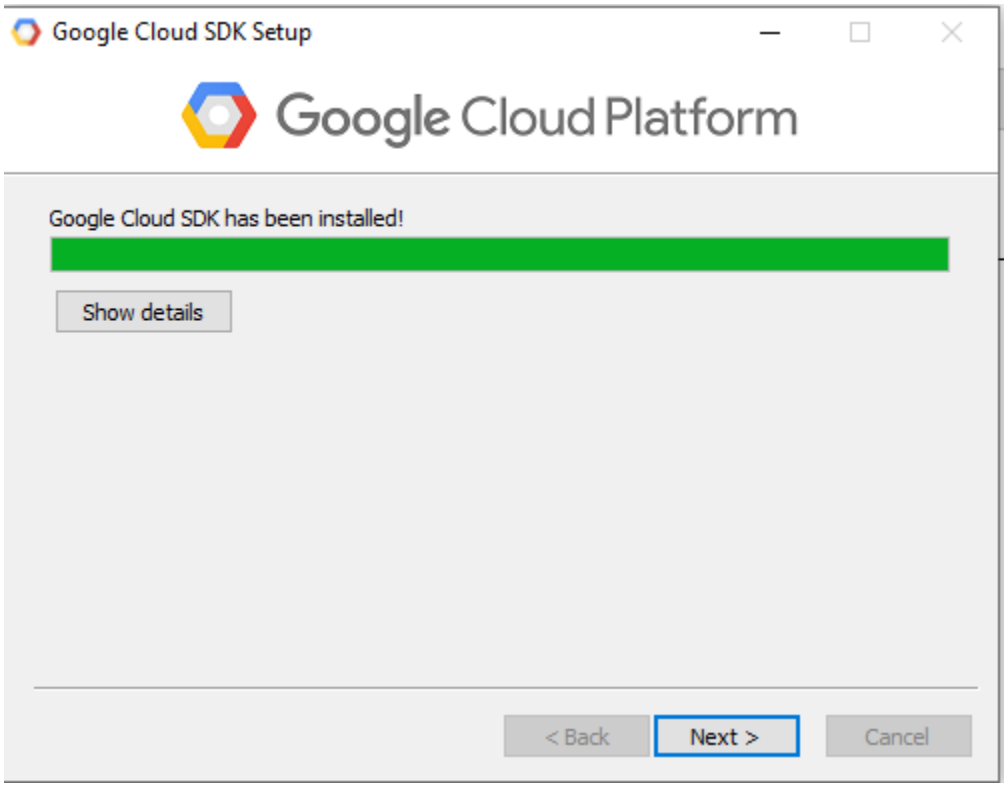
Give the destination path where you are going to install your GAE



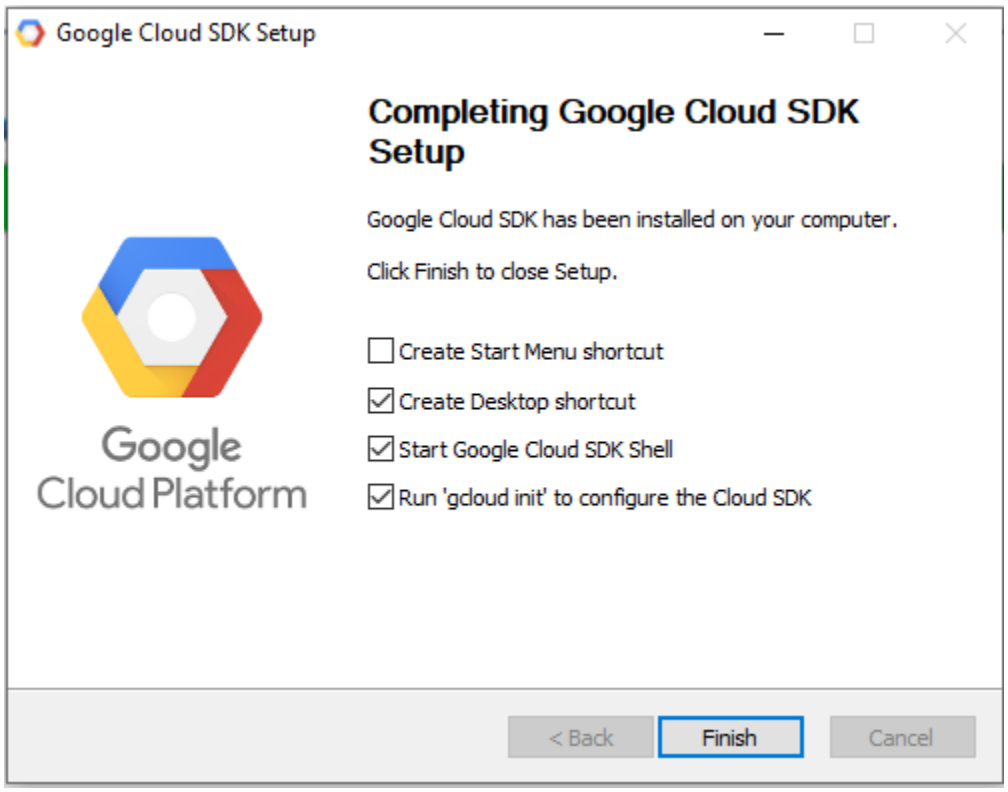
Click Install and wait till installation gets completed




Google Cloud SDK Setup
Google Cloud Platform
Installing components.
Show details
< Back
Next >
Cancel


Google Cloud SDK Setup
Google Cloud Platform
Google Cloud SDK has been installed!
Show details
< Back
Next >
Cancel

After installation is over click finish



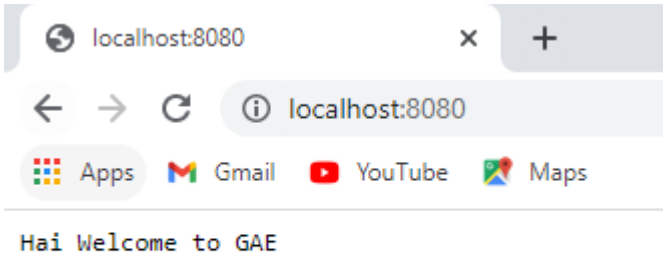

```
Welcome to the Google Cloud SDK! Run "gcloud -h" to get the list of available commands.
---
Welcome! This command will take you through the configuration of gcloud.

Your current configuration has been set to: [default]

You can skip diagnostics next time by using the following flag:
  gcloud init --skip-diagnostics

Network diagnostic detects and fixes local network connection issues.
Checking network connection...done.
Reachability Check passed.
Network diagnostic passed (1/1 checks passed).

You must log in to continue. Would you like to log in (Y/n)?
```

```
C:\Windows\SYSTEM32\cmd.exe - gcloud  init
Welcome to the Google Cloud SDK! Run "gcloud -h" to get the list of available commands.
---
Welcome! This command will take you through the configuration of gcloud.

Your current configuration has been set to: [default]

You can skip diagnostics next time by using the following flag:
  gcloud init --skip-diagnostics

Network diagnostic detects and fixes local network connection issues.
Checking network connection...done.
Reachability Check passed.
Network diagnostic passed (1/1 checks passed).

You must log in to continue. Would you like to log in (Y/n)?  Y
```

Run the python file using Google Cloud SDK Shell

```
Administrator: Google Cloud SDK Shell - google-cloud-sdk\bin\dev_appserver.py  "E:\PROGRAMMING LANGUAGES\HelloWorld"
Welcome to the Google Cloud SDK! Run "gcloud -h" to get the list of available commands.
---

C:\Windows\system32>d:

D:\>e:

E:\PROGRAMMING LANGUAGES\GAE>google-cloud-sdk\bin\dev_appserver.py "E:\PROGRAMMING LANGUAGES\HelloWorld"
This action requires the installation of components: [app-engine-
python, cloud-datastore-emulator]


Your current Cloud SDK version is: 319.0.0
Installing components from version: 319.0.0

+-----------------------------------------------------+
|        These components will be installed.          |
+-------------------------------+---------+-----------+
|            Name               | Version |   Size    |
+-------------------------------+---------+-----------+
| Cloud Datastore Emulator      |   2.1.0 | 18.4 MiB  |
| gRPC python library           |  1.20.0 |           |
| gRPC python library           |  1.20.0 |  1.5 MiB  |
| gcloud app Python Extensions  |  1.9.91 |  6.1 MiB  |
+-------------------------------+---------+-----------+

For the latest full release notes, please visit:
  https://cloud.google.com/sdk/release_notes

Do you want to continue (Y/n)?  Y

#============================================================#
#= Creating update staging area                             =#
#============================================================#
#= Installing: Cloud Datastore Emulator                     =#
#============================================================#
#= Installing: gRPC python library                          =#
#============================================================#
#= Installing: gRPC python library                          =#
#============================================================#
#= Installing: gcloud app Python Extensions                 =#
#============================================================#
#= Creating backup and activating new installation          =#
#============================================================#

Performing post processing steps...done.

Update done!

Restarting command:
  $ dev_appserver.py E:\PROGRAMMING LANGUAGES\HelloWorld

INFO     2020-11-19 11:06:30,499 devappserver2.py:289] Skipping SDK update check.
WARNING  2020-11-19 11:06:30,854 simple_search_stub.py:1198] Could not read search indexes from c:\users\bastin~1\appdata\local\temp\appengine.None\search_indexes
INFO     2020-11-19 11:06:30,858 api_server.py:282] Starting API server at: http://localhost:56792
INFO     2020-11-19 11:06:30,865 dispatcher.py:267] Starting module "default" running at: http://localhost:8080
INFO     2020-11-19 11:06:30,865 admin_server.py:150] Starting admin server at: http://localhost:8000
INFO     2020-11-19 11:06:32,907 instance.py:294] Instance PID: 12336
INFO     2020-11-19 11:07:22,210 module.py:865] default: "GET / HTTP/1.1" 200 19
INFO     2020-11-19 11:07:22,273 module.py:865] default: "GET /favicon.ico HTTP/1.1" 404 -
INFO     2020-11-19 11:07:23,334 instance.py:294] Instance PID: 14484
```

Open your browser and type localhost:8080



Result:

Thus, we can create simple web based applications using Python and Java and execute using GAE.