Ex. No 1 LAUNCHING VIRTUALBOX USING TRYSTACK

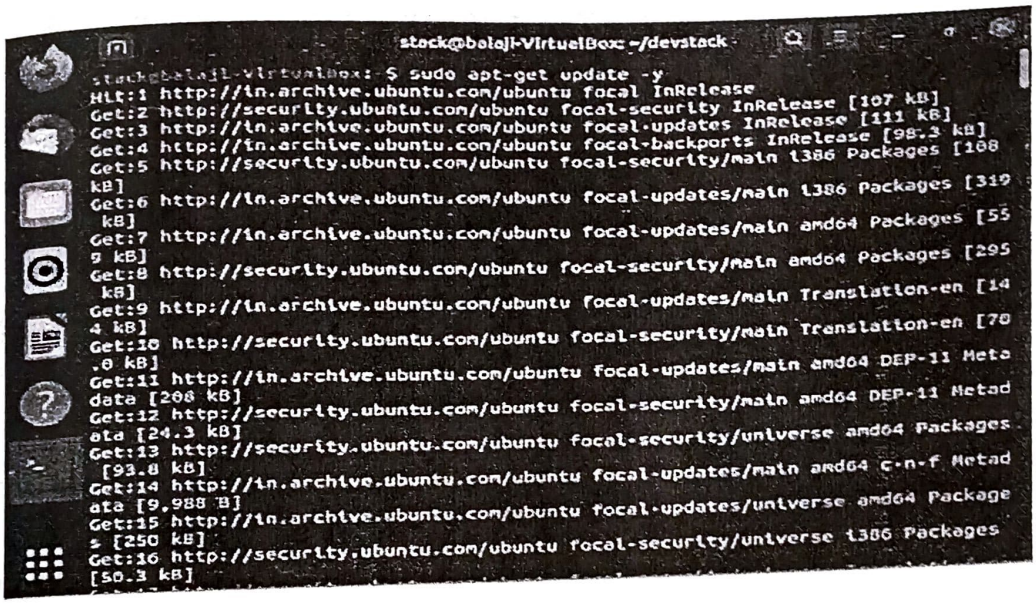
5/10/21

AIM:

To Launch Virtual Box using Try tack

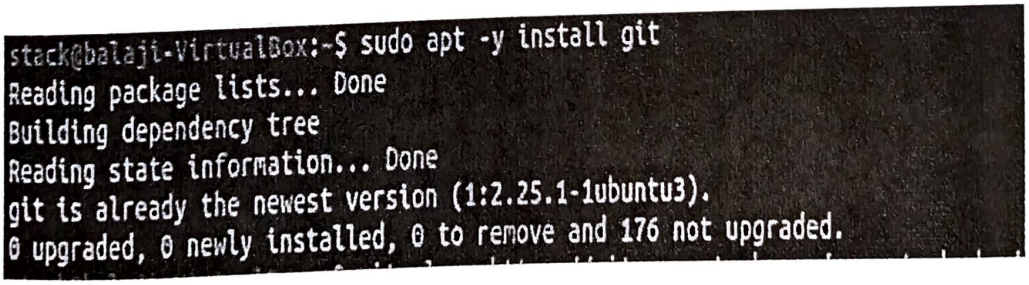
PROCEDURE:

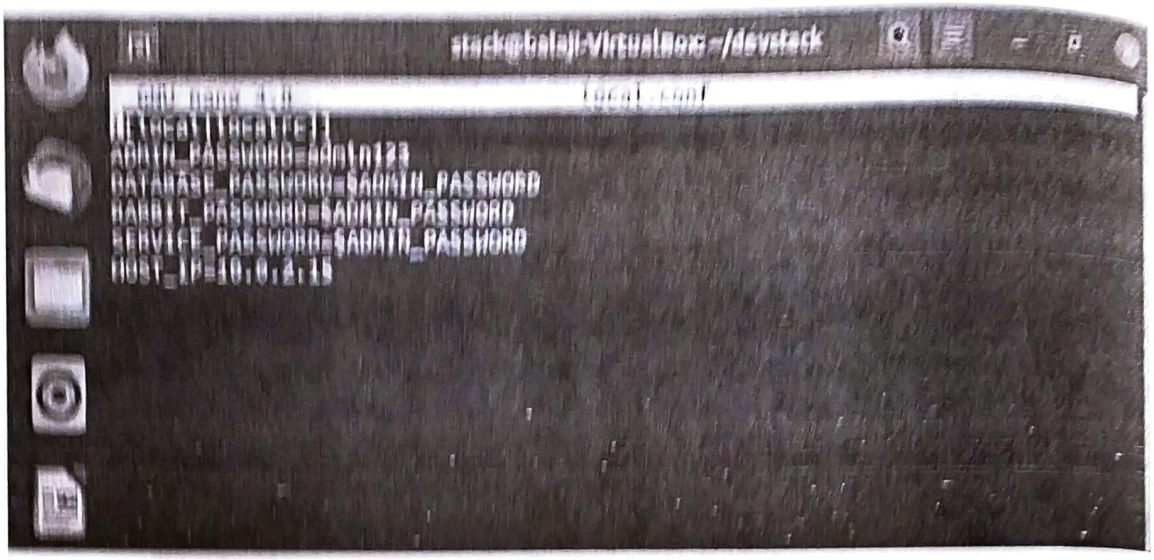
STEP 0: **Prepare the environment and Update**
$sudo apt-get update -y



STEP1: Find your IP address in Linux Server **~$ ipaddr show**

STEP2: Install Git Package to access Git-Repository
~$ sudo apt -y install git





git clone https://github.com/openstack/devstack

STEP 3:GitClone Command Make copy of existing Repo

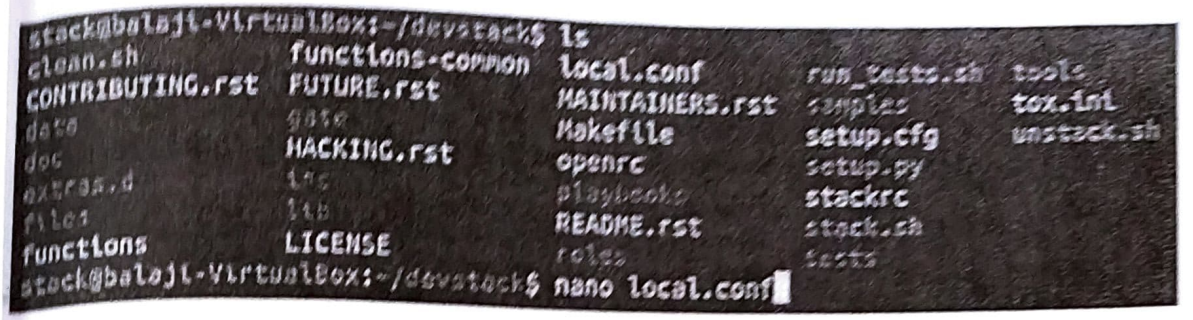
$git clone https://git.openstack.org/openstack dev/devstack

```
stack@balaji-VirtualBox:~$ git clone https://git.openstack.org/openstack-dev/de
vstack
Cloning into 'devstack'...
warning: redirecting to https://opendev.org/openstack/devstack/
remote: Enumerating objects: 46226, done.
remote: Counting objects: 100% (46226/46226), done.
remote: Compressing objects: 100% (21129/21129), done.
remote: Total 46226 (delta 32674), reused 37512 (delta 24392)
Receiving objects: 100% (46226/46226), 9.50 MiB | 417.00 KiB/s, done.
Resolving deltas: 100% (32674/32674), done.
```

STEP4:Command to Change Directory To devstack

```
stack@balaji-VirtualBox:~$ cd devstack
```

STEP 5:Command to list files in Devstack



STEP 6: Insert Set Of code in Local.conf

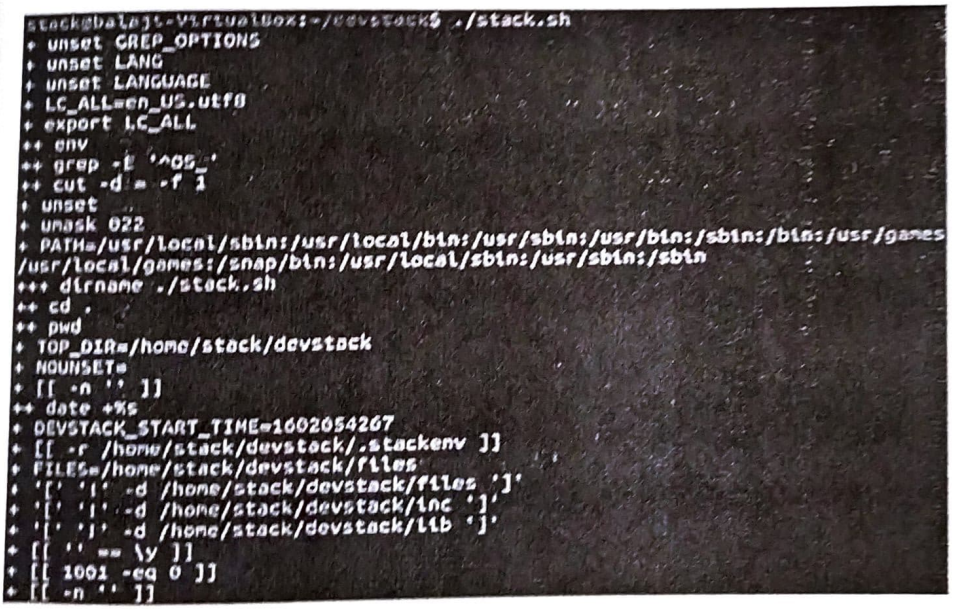
~$nano local.conf

^x

y

-nano is an easy to use command line text editor for Unix and Linux

STEP 7:Final Command to install OpenStack



RESULT

To Launch Virtual Box using Try tack is done and output is obtained

Ex. No 2 **TO GAE LAUNCHER TO LAUNCH THE WEB APPLICATIONS.**

5/10/21

AIM:

To use GAE Launcher to launch web applications.

PROCEDURE:

STEP0: visit https://console.cloud.google.com/

STEP1: Create a new Cloud Console project or retrieve the project ID of an existing project to use: Go to the Project page

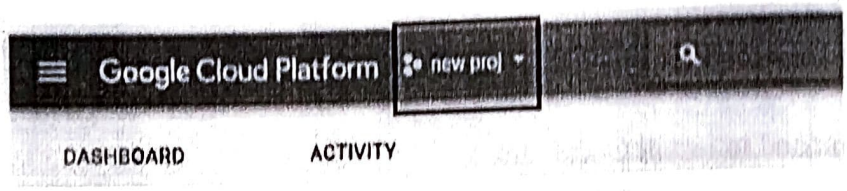
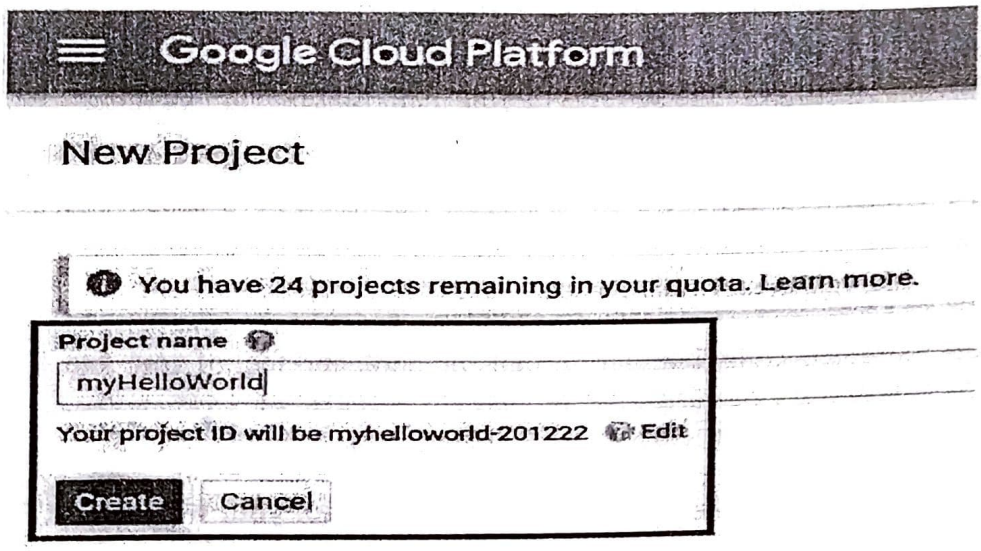
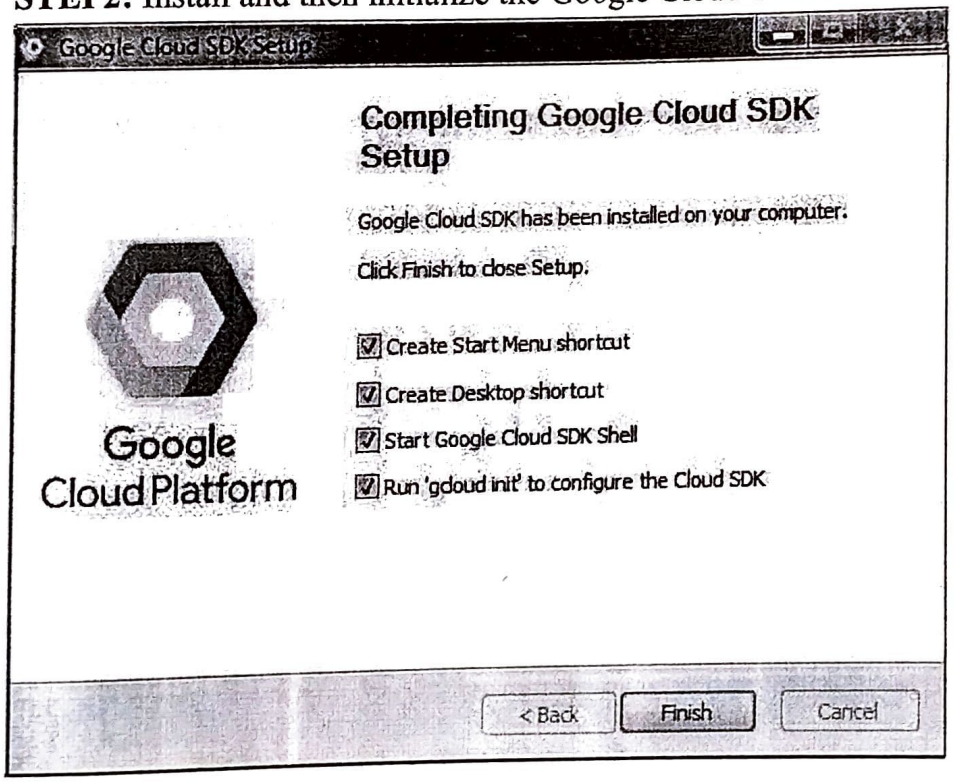


Image courtesy. https://console.cloud.google.com/home

Image courtesy https://console.cloud.google.com/home



STEP2: Install and then initialize the Google Cloud SDK Download SDK



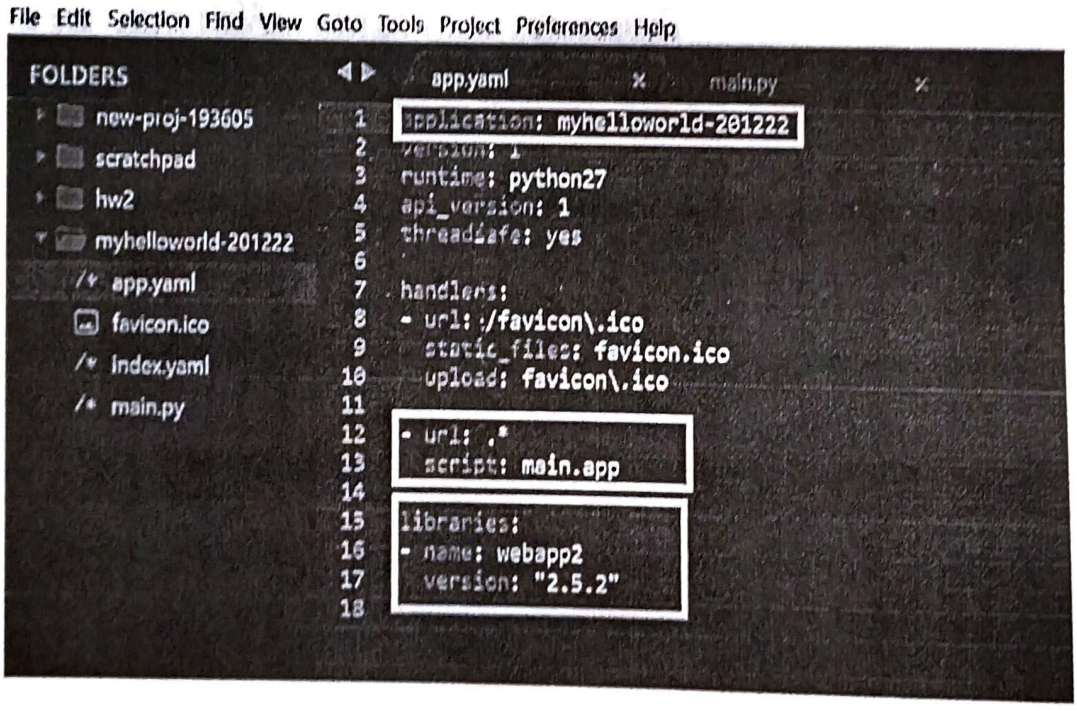
STEP3: Creating a website to host on Google App Engine

Basic structure for the project

This guide uses the following structure for the project:

- app.yaml: Configure the settings of your App Engine application.
- www/: Directory to store all of your static files, such as HTML, CSS, images, and JavaScript.
- css/: Directory to store stylesheets.
- style.css: Basic stylesheet that formats the look and feel of your site.
- Images/: Optional directory to store images.
- index.html: An HTML file that displays content for your website.
- js/: Optional directory to store JavaScript files.
- Other asset directories.

STEP 4: Creating the app.yaml file

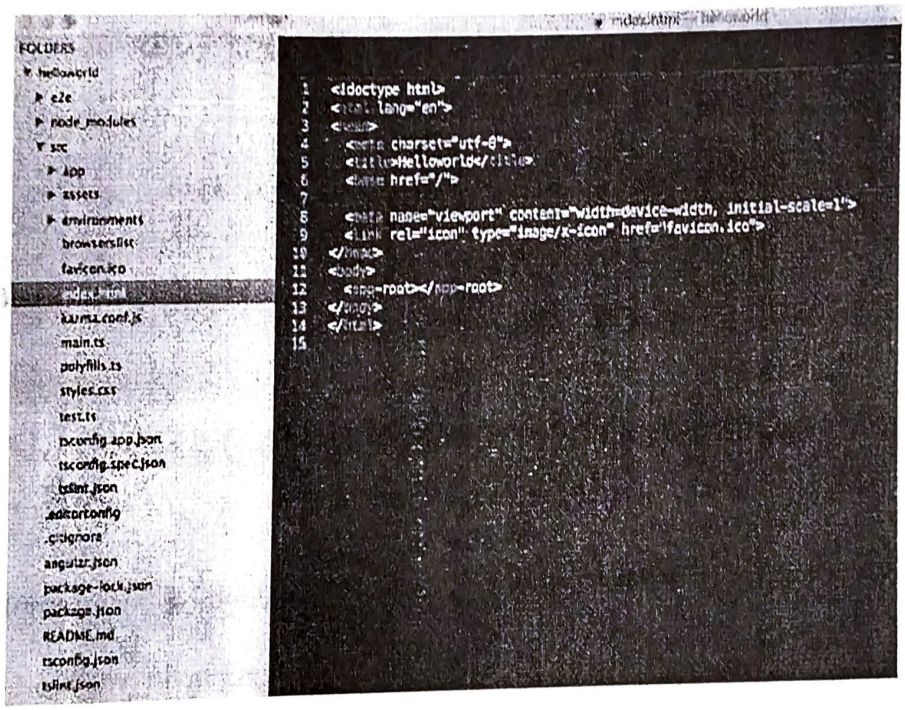


1.Create a directory that has the same name as your project ID. You can find your project ID in the Console.
2.In directory that you just created, create a file named app.yaml.
3.Edit the app.yaml file and add the following code to the file:

4.runtime: python27
api_version: 1
threadsafe: true
handlers:
- url: /
static_files: www/index.html upload: www/index.html

- url: /(.*) static_files: www/\1 upload: www/(.*)

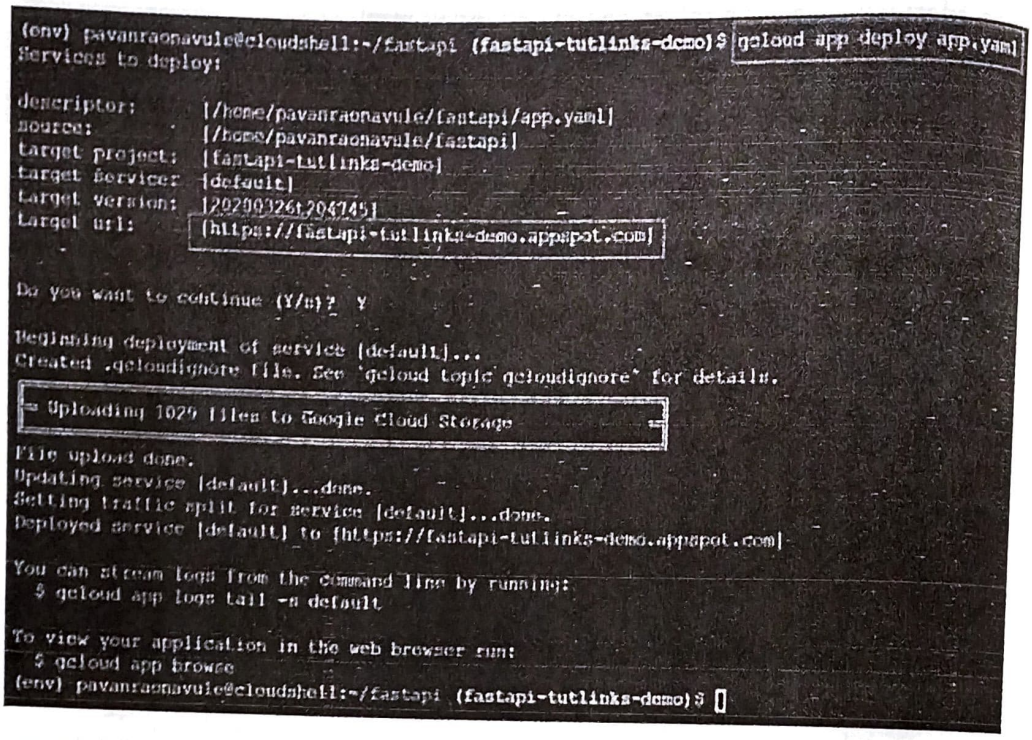
STEP5: Creating the index.html file



<html>
<head>
<title>Hello, world!</title>
<link rel="stylesheet" type="text/css" href="/css/style.css">
</head>
<body>
<h1>Hello, world!</h1>
<p>
This is a simple static HTML file that will be served from Google App Engine.

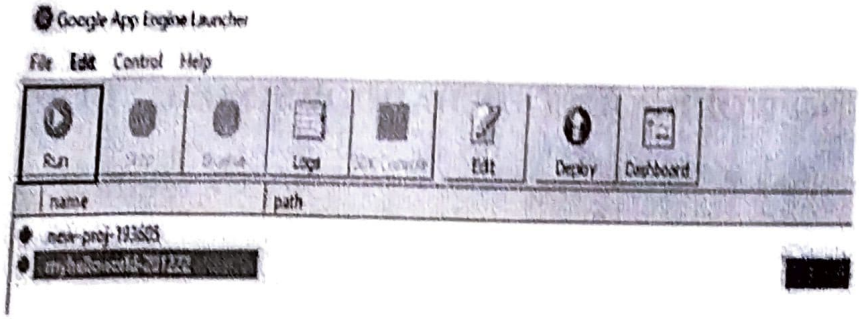
</p>
</body>
</html>

STEP 6: Deploying your application to App Engine



STEP 7: Once the shell is open, enter the following commands:

1. gcloud app create
2. git clone https://github.com/GoogleCloudPlatform/python-docs-samples
3. cd python-docs-samples/appengine/standard_python3/hello_world
4. virtualenv --python python3 ~/envs/hello_world
5. source ~/envs/hello_world/bin/activate
6. pip install -r requirements.txt
7. python main.py



STEP 8: Then click "web preview" and select "preview on port 8080.

OUTPUT

RESULT

Thus the procedure to GAE Launcher to launch web applications is done and output is obtained

5/10/21

Ex.No.3 RUNNING WORDCOUNT ON HADOOP SINGLE NODE CLUSTER

AIM:

To Run wordcount on hadoop single node cluster

PROCEDURE:

STEPS:

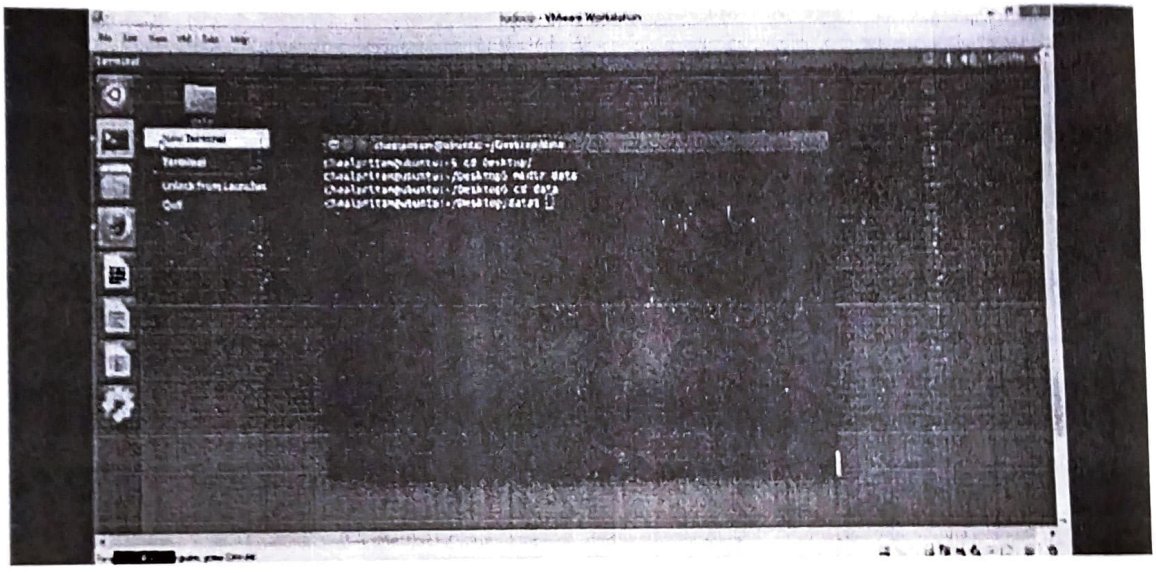
Step 1: Creating a working directory for your data

user@ubuntu:~$ cd Desktop/

user@ubuntu:~/ Desktop$ mkdir data

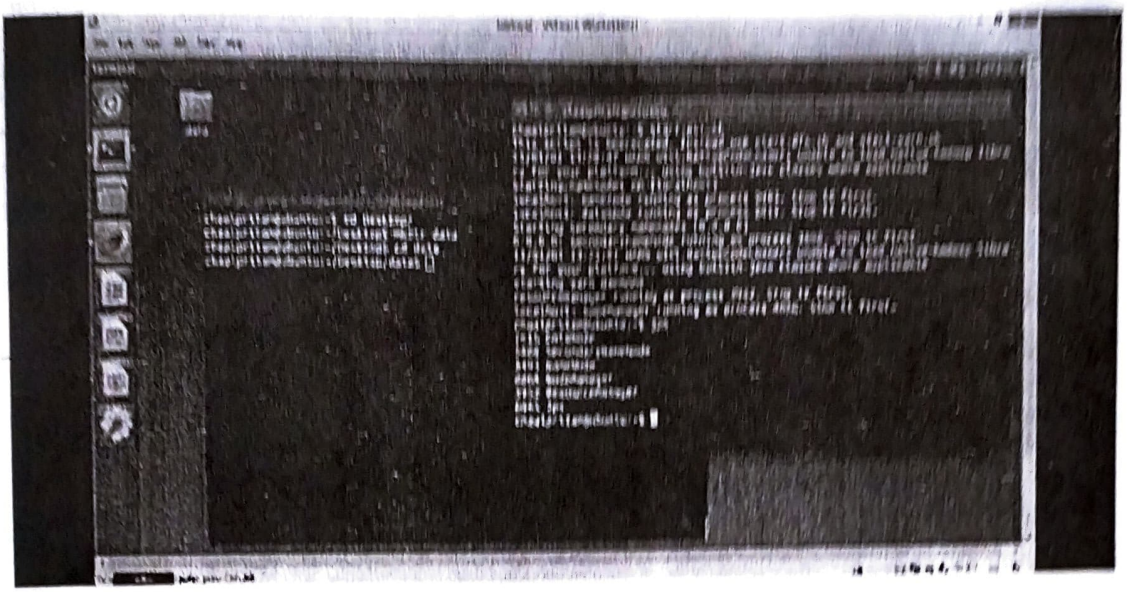
user@ubuntu:~/ Desktop$ cd data

user@ubuntu:~/ Desktop/ data$



Step 2:

user@ubuntu:~ start-all.sh



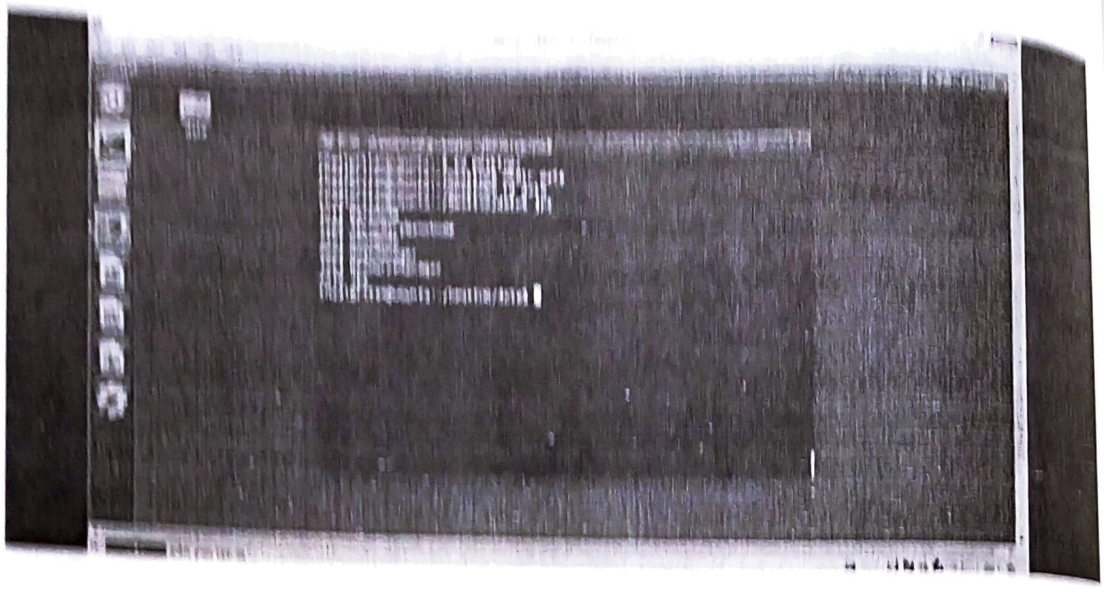
Step 3:

user@ubuntu:~$ cd Desktop/

user@ubuntu:~/ Desktop$ mkdir data

user@ubuntu:~/ Desktop$ cd data

user@ubuntu:~/ Desktop/ data$ jps

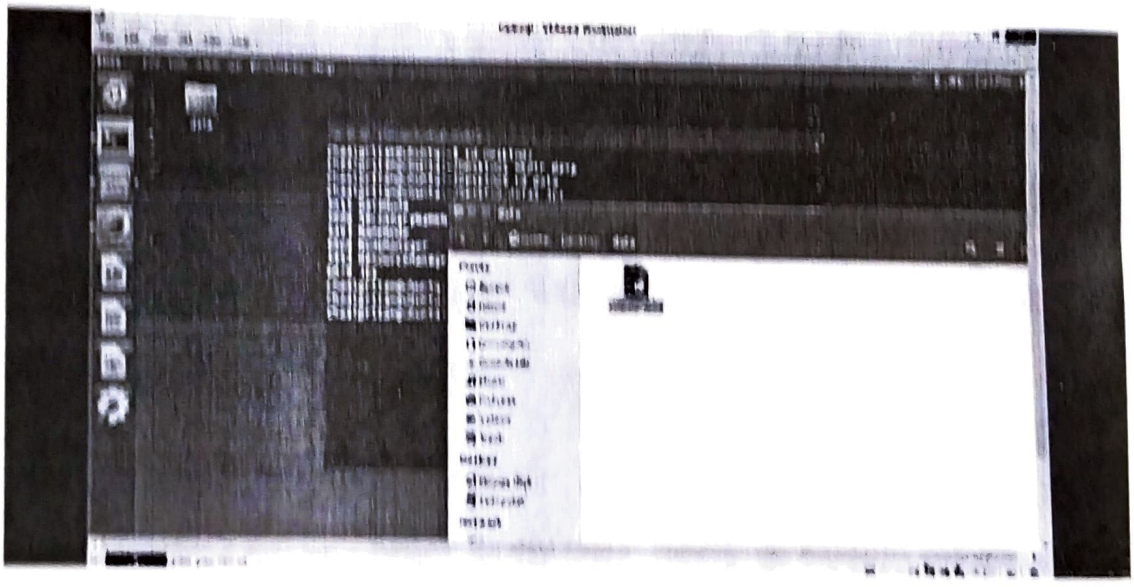


Step 4:

user@ubuntu:~/ Desktop/ data$ jps >> testing.txt

user@ubuntu:~/ Desktop/ data$ cd

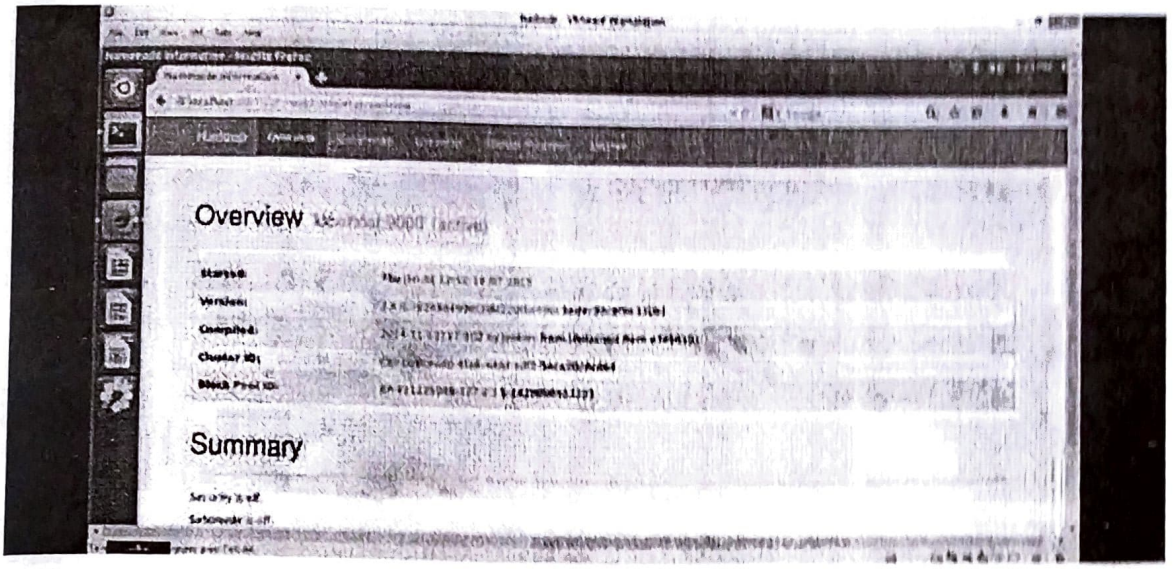
user@ubuntu:~$

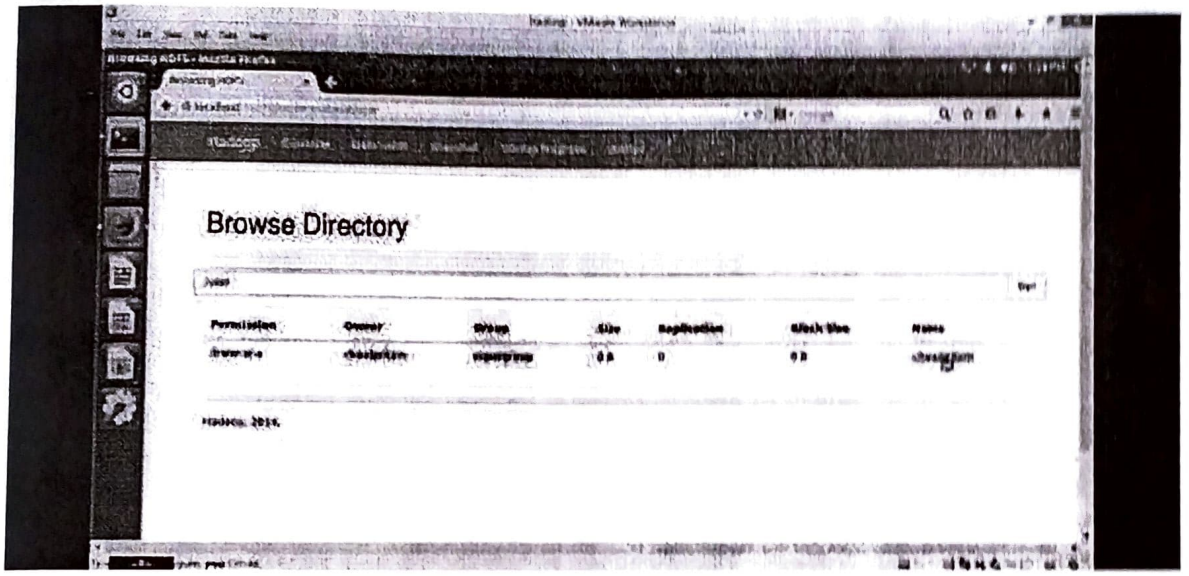


Step 5:

user@ubuntu:~$ cd /user /local /hadoop/

user@ubuntu: /user /local /hadoop$ bin/hdfsdfs -mkdir /user



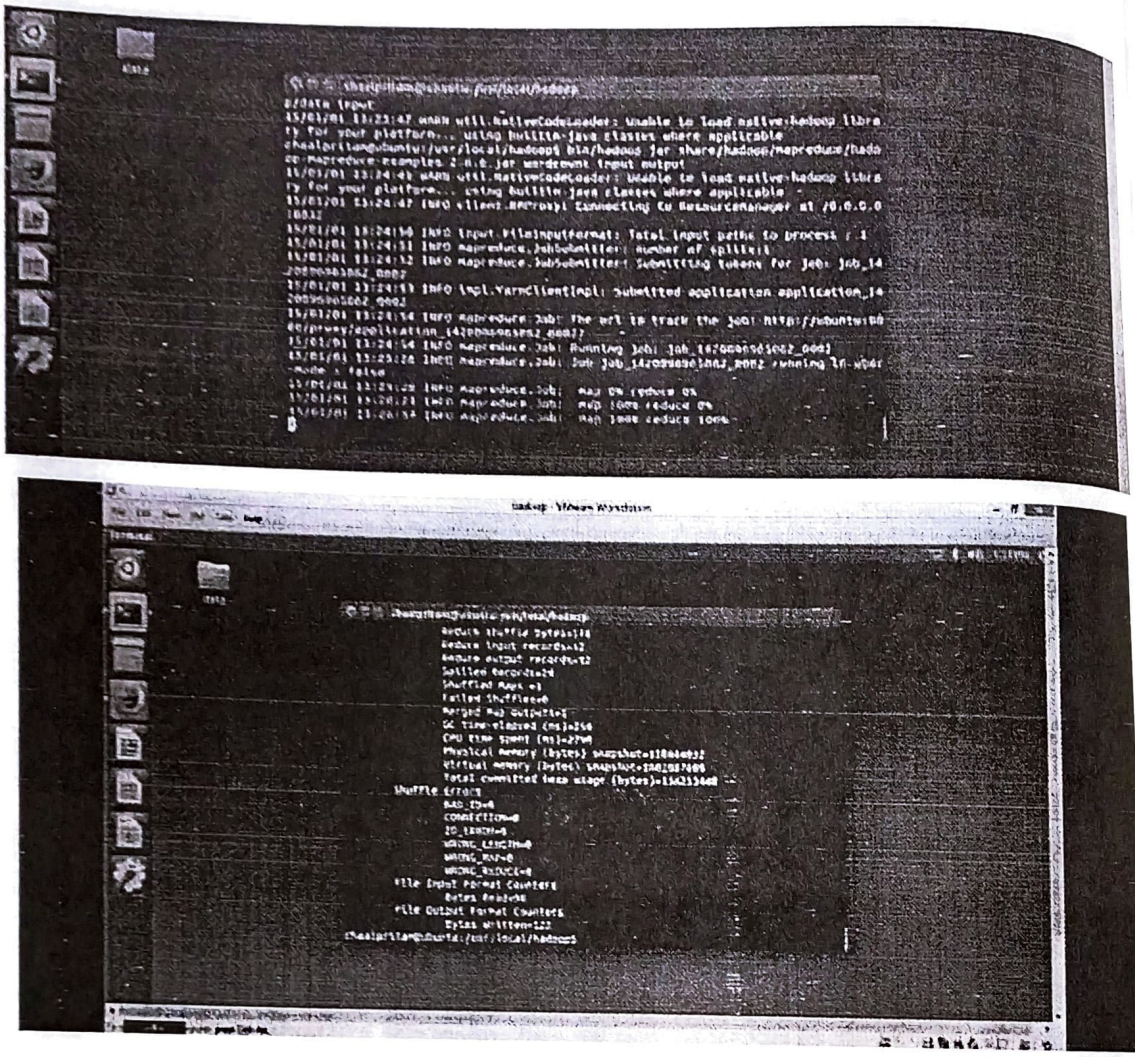


Step 6:

user@ubuntu: /user /local /hadoop$ bin/hdfsdfs -put /home /user /Desktop /data input

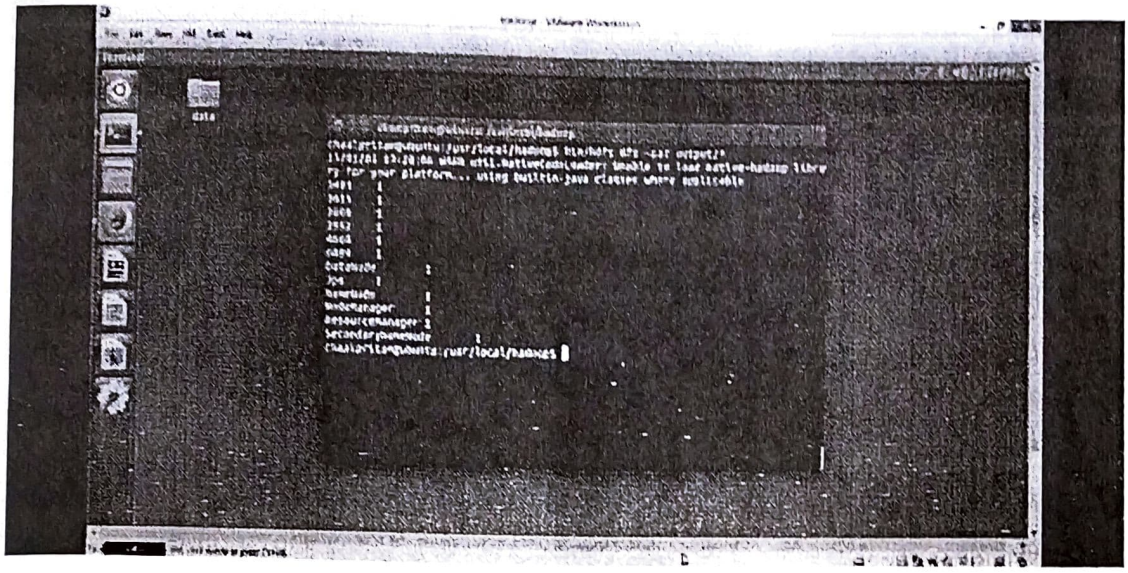
user@ubuntu: /user /local /hadoop$ bin/hadoop jar share/hadoop /mapreduce /hadoop-mapreduce-examples-2.6.0. jar wordcount input

OUTPUT

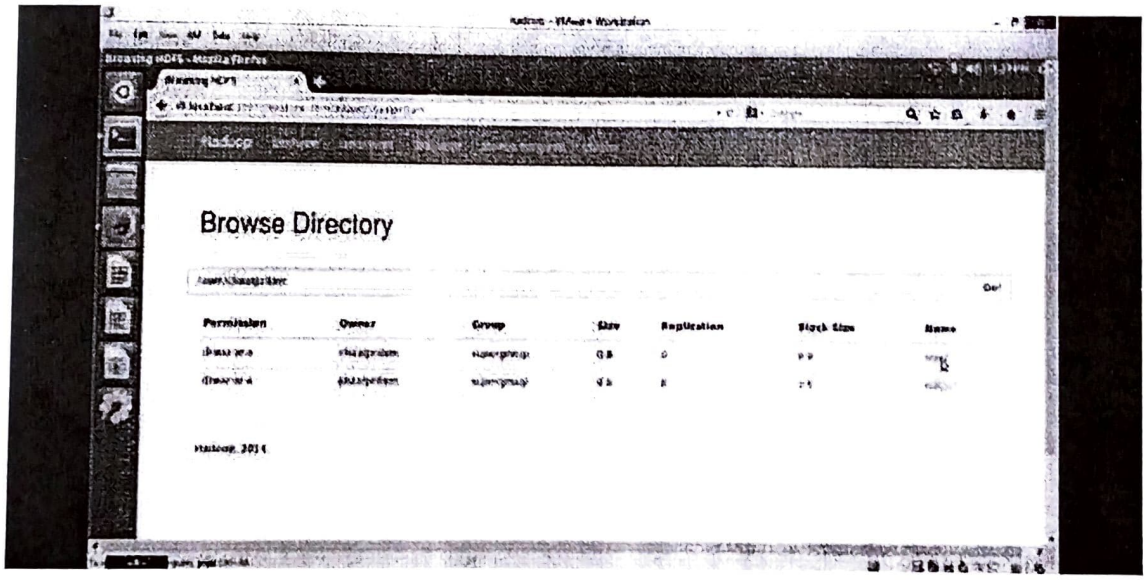


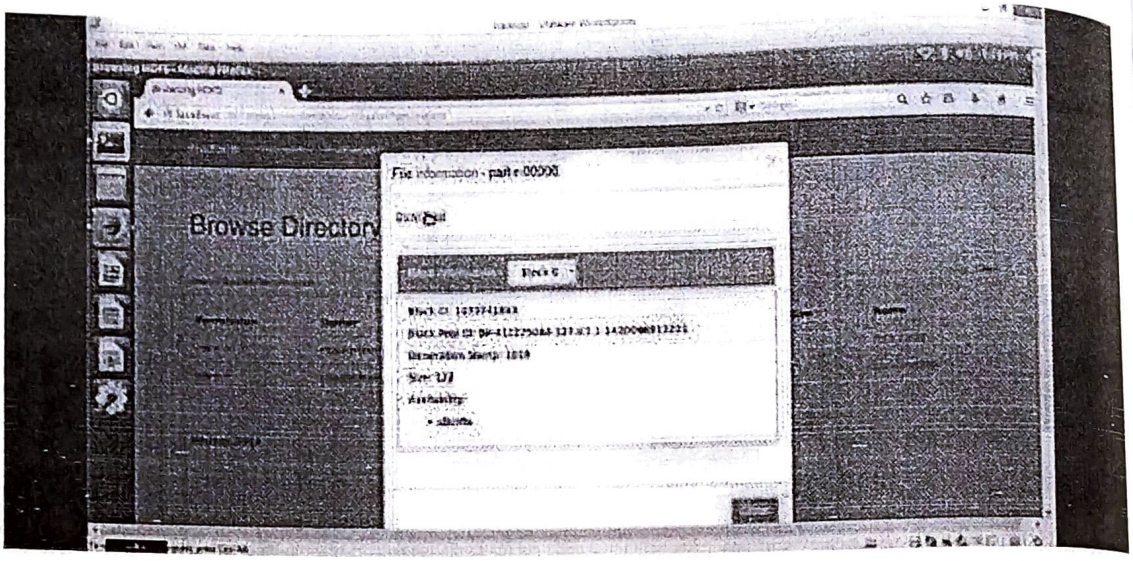
Step 7:

user@ubuntu: /user /local /hadoop$ bin/hdfsdfs -cat output /*

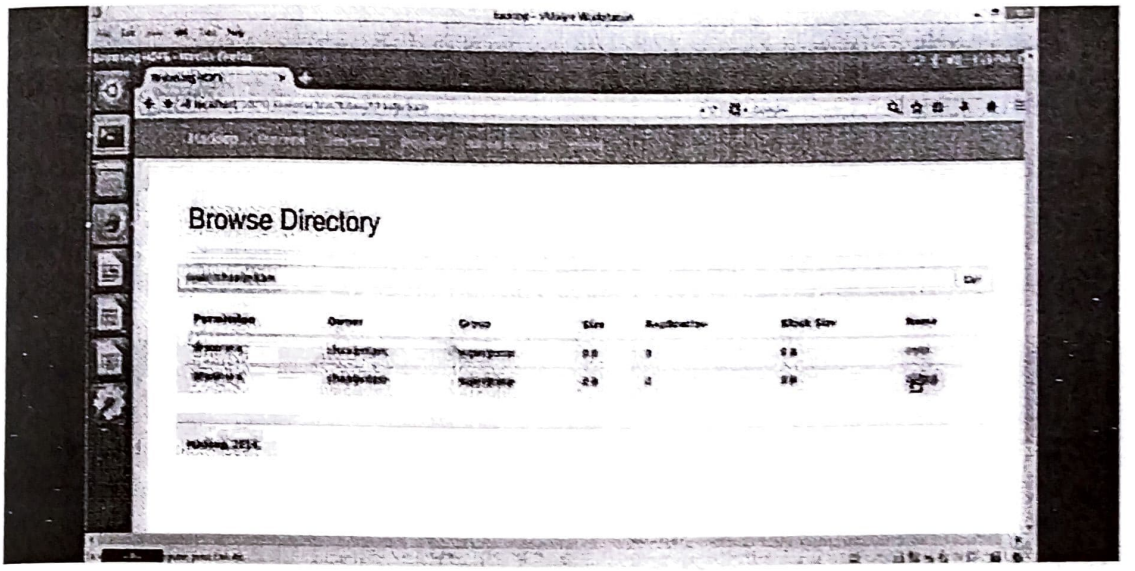


Step 8:

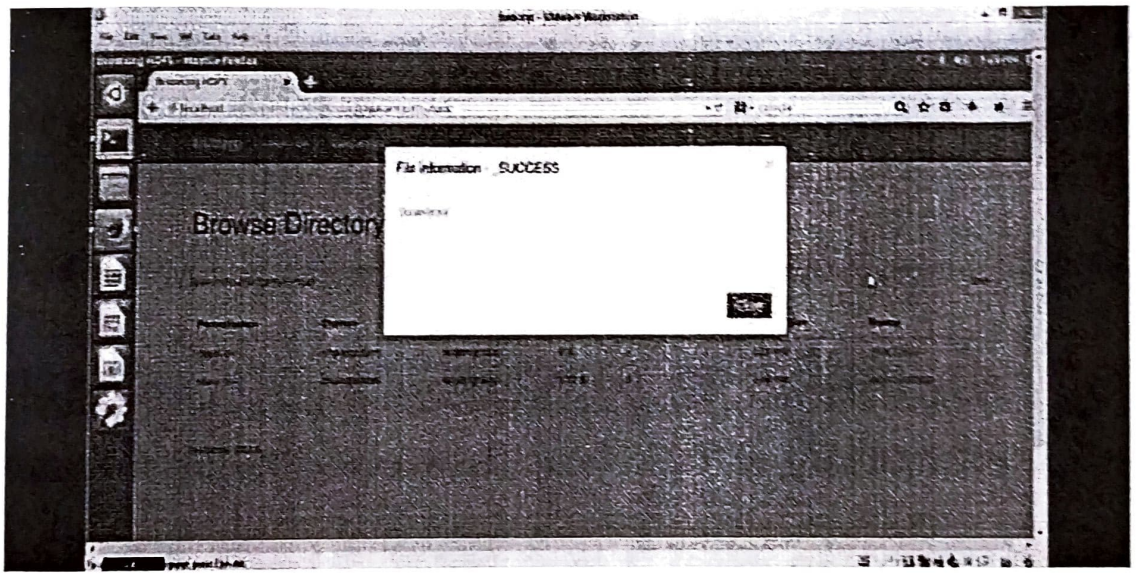



Browse Directory

Step 9:



Step 10:



RESULT

Thus the running word count on hadoop single node cluster is done and output is obtained

Ex.no.4 LAUNCHING VIRTUALBOX USING TRYSTACK

12/10/24

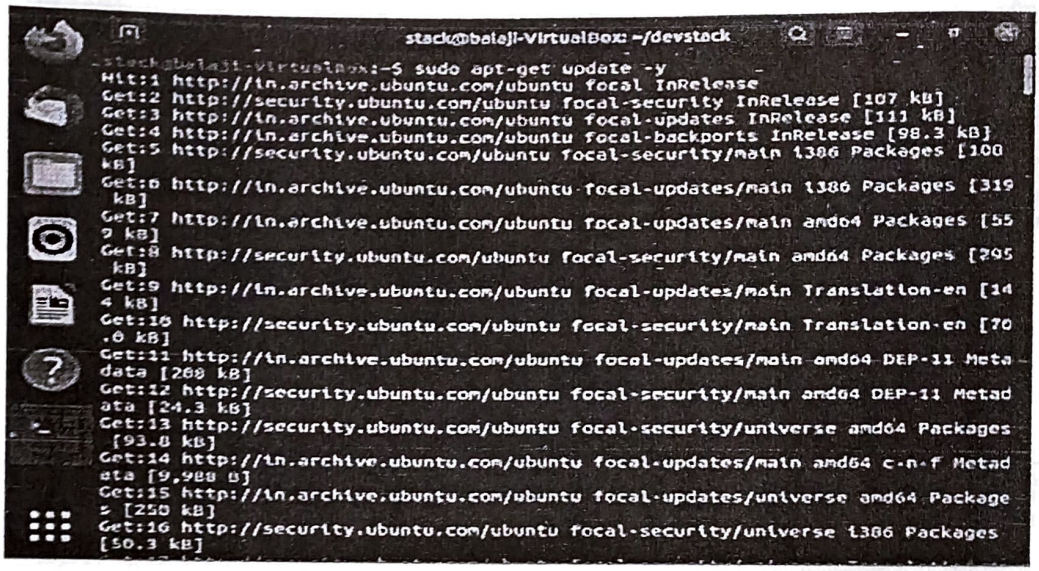
AIM:

To Launch virtualbox using trystack

PROCEDURE:

STEP 0: **Prepare the environment and Update**

$sudo apt-get update -y



STEP1: Find your IP address in Linux Server **~$ ipaddr show**

STEP2: Install Git Package to access Git-Repository

~$ sudo apt -y install git

```
stack@balaji-VirtualBox:~$ sudo apt -y install git
Reading package lists... Done
Building dependency tree
Reading state information... Done
git is already the newest version (1:2.25.1-1ubuntu3).
0 upgraded, 0 newly installed, 0 to remove and 176 not upgraded.
```

STEP 3:GitCLone Command Make copy of existing Repo

~$**git clone** https://git.openstack.org/openstack-dev/devstack

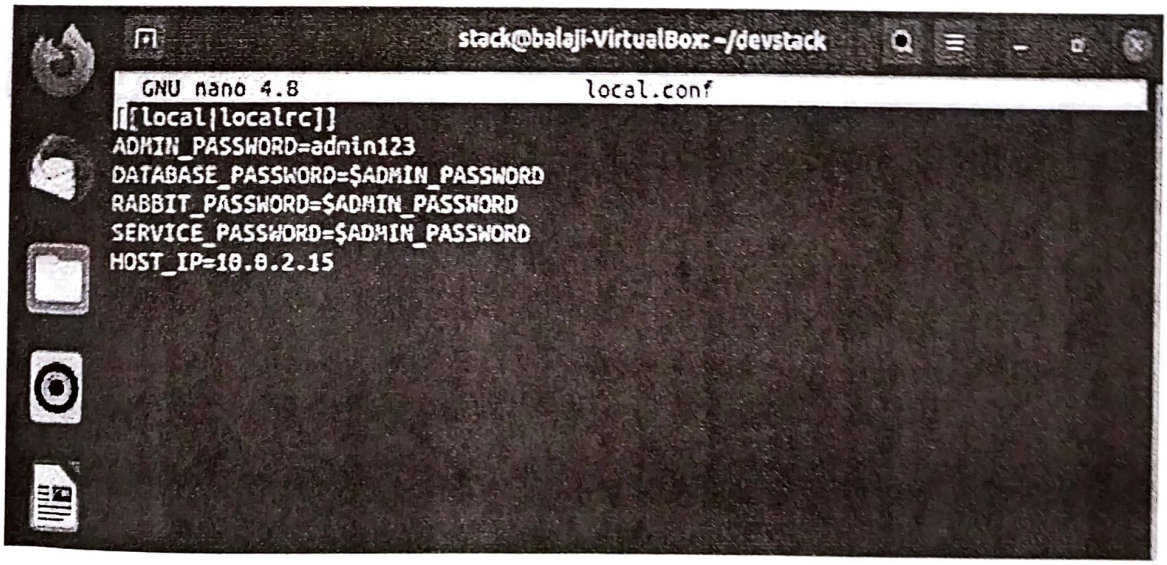
```
stack@balaji-VirtualBox:~$ git clone https://git.openstack.org/openstack-dev/de
vstack
Cloning into 'devstack'...
warning: redirecting to https://opendev.org/openstack/devstack/
remote: Enumerating objects: 46226, done.
remote: Counting objects: 100% (46226/46226), done.
remote: Compressing objects: 100% (21129/21129), done.
remote: Total 46226 (delta 32674), reused 37512 (delta 24392)
Receiving objects: 100% (46226/46226), 9.50 MiB | 417.00 KiB/s, done.
Resolving deltas: 100% (32674/32674), done.
```

STEP4:Command to Change Directory To devstack

```
stack@balaji-VirtualBox:~$ cd devstack
```

STEP 5:Command to list files in Devstack

```
stack@balaji-VirtualBox:~/devstack$ ls
clean.sh            functions-common  local.conf      run_tests.sh  tools
CONTRIBUTING.rst    FUTURE.rst        MAINTAINERS.rst samples       tox.ini
data                gate              Makefile        setup.cfg     unstack.sh
doc                 HACKING.rst       openrc          setup.py
extras.d            inc               playbooks       stackrc
files               lib               README.rst      stack.sh
functions           LICENSE           roles           tests
stack@balaji-VirtualBox:~/devstack$ nano local.conf
```

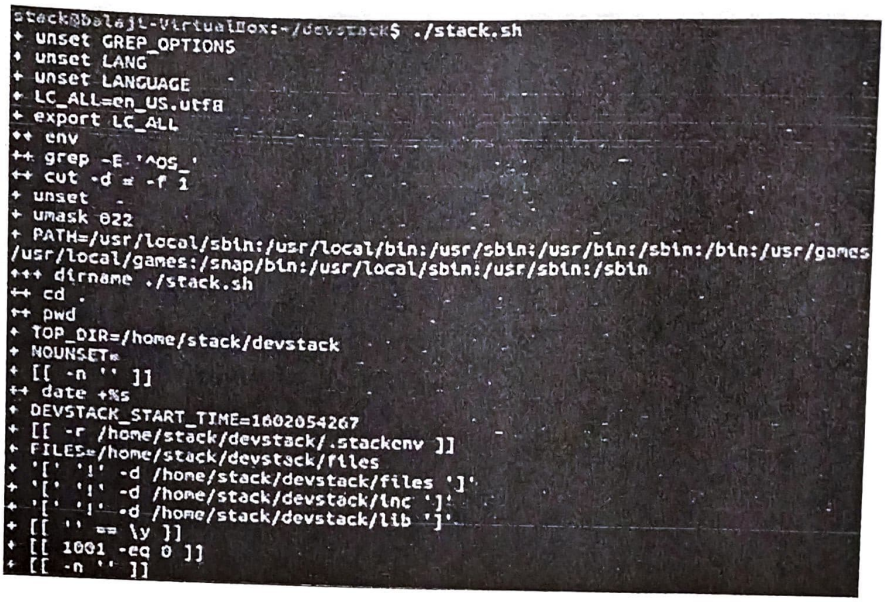


STEP 6: Insert Set Of code in Local.conf

~$nano local.conf

-nano is an easy to use command line text editor for Unix and Linux

STEP7: Final Command to install OpenStack



RESULT

Thus the process for Launching Virtualbox Using Trystack is done and output is obta

Ex. No. 5 INSTALL HADOOP SINGLE NODE CLUSTER

12/10/21

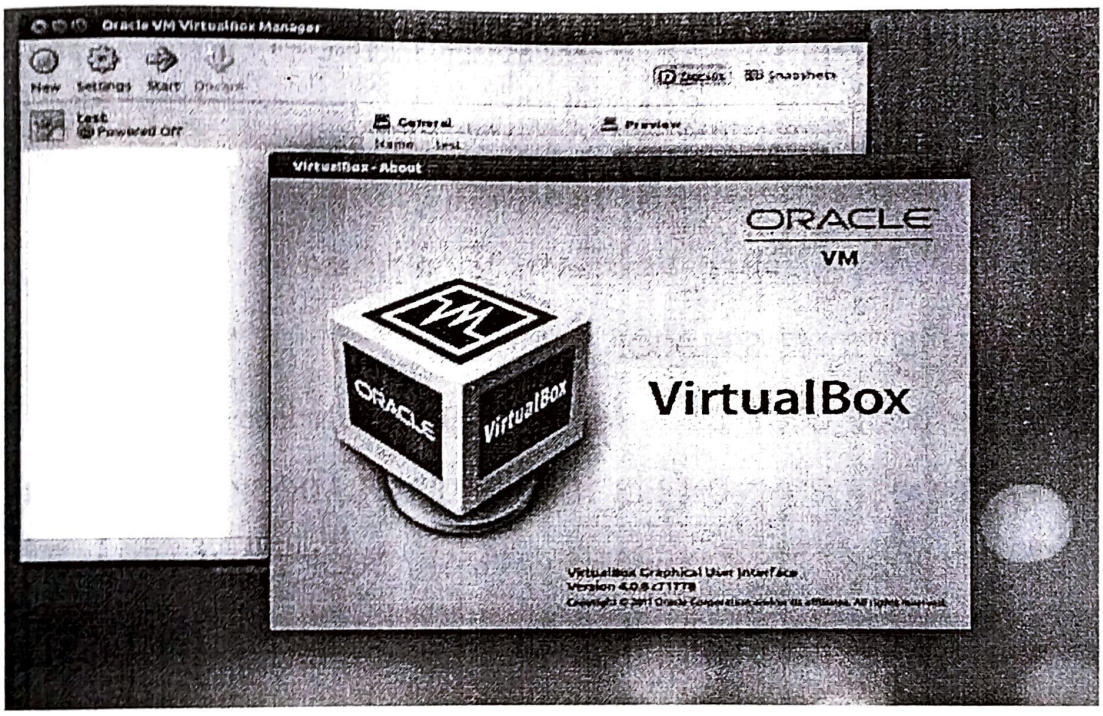
AIM:

- VIRTUAL BOX: it is used for installing the operating system on it.
- OPERATING SYSTEM: You can install Hadoop on Linux based operating systems. Ubuntu is used.
- JAVA: You need to install the Java 8 package on your system.
- HADOOP: You require Hadoop 3.2.1 package.

PROCEDURE:

Install virtual box

https://download.virtualbox.org/virtualbox/6.1.14/VirtualBox-6.1.14-140239-Win.exe



After completing the virtual box installation ,Install Ubuntu

https://ubuntu.com/download/desktop

Click to download Hadooop:

https://hadoop.apache.org/releases.html

STEPS:

Step 1: Install Java

Command: sudo apt install openjdk-8-jdk

cd /usr/lib/jvm

Step 2:Openbashrc file

Command: sudo nano ~/.bashrc

Location Path of the Environment variable:

Past these:

export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64

export PATH=$PATH:export PATH=$PATH:/usr/lib/jvm/java-8-openjdk-amd64/bi

export HADOOP_HOME=~/Downloads/hadoop-3.2.1/

export PATH=$PATH:$HADOOP_HOME/bin

export PATH=$PATH:$HADOOP_HOME/sbin

export HADOOP_MAPRED_HOME=$HADOOP_HOME

export YARN_HOME=$HADOOP_HOME

export HADOOP_CONF_DIR=$HADOOP_HOME/etc/hadoop

export HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_HOME/lib/native

export HADOOP_OPTS="-Djava.library.path=$HADOOP_HOME/lib/native"

export

HADOOP_STREAMING=$HADOOP_HOME/share/hadoop/tools/lib/hadoop-streaming-3.2.1.jar

export HADOOP_LOG_DIR=$HADOOP_HOME/logs

export PDSH_RCMD_TYPE=ssh

export HIVE_HOME=~/Downloads/apache-hive-3.1.2-bin

export PATH=$PATH:~/Downloads/apache-hive-3.1.2-bin/bin

Then come out of the file.

Step 3:Install Secure shell

Command: sudo apt-get install ssh

Step 4: Install parallel shell

Command: sudo apt-get install pdsh

Step 5: Extract Hadoop tar file:

Command: tar -zxvf ~/Downloads/hadoop-3.2.1.tar.gz

Go to Hadoop directory

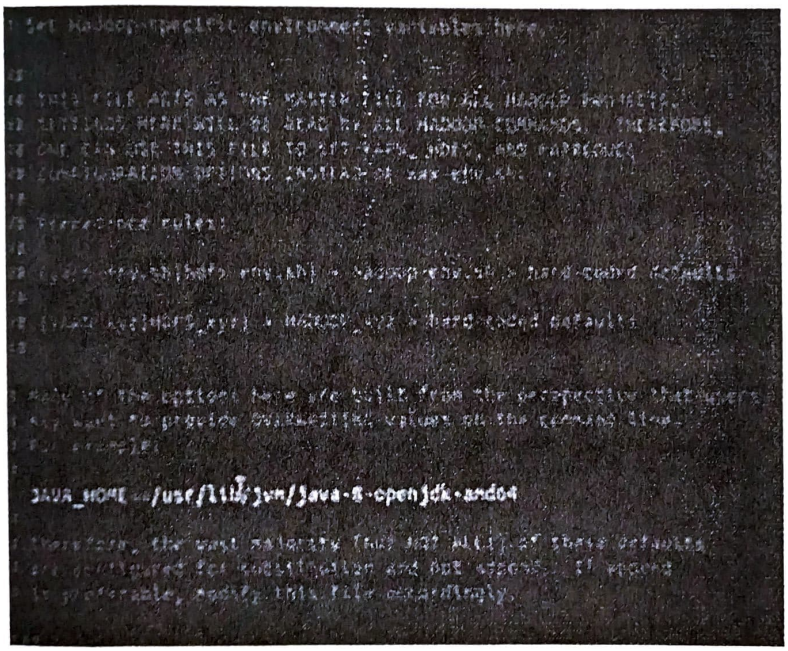
Command: cd hadoop-3.2.1/etc/Hadoop

Step 6: Open Hadoop-env.h

Command: sudo nano hadoop-env.h

-JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64

(Set the path for JAVA_HOME)



Step 7: Go  to coresite.xml

Command: sudo nano coresite.xml

Paste these:

<configuration>

<property>

<name>fs.defaultFS</name>

<value>hdfs://localhost:9000</value>

</property>

<property>

<name>hadoop.proxyuser.dataflair.groups</name>

<value>*</value>

</property>

<property>

<name>hadoop.proxyuser.dataflair.hosts</name>

<value>*</value>

</property>

<property>

<name>hadoop.proxyuser.server.hosts</name>

<value>*</value>

</property>

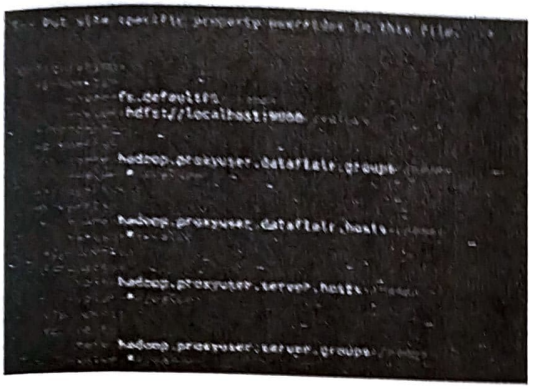
<property>

<name>hadoop.proxyuser.server.groups</name>

<value>*</value>

</property>

</configuration>



Step 8: Go to hdfs-site.xml

Command: sudo nano hdfs-site.xml

Paste these:

<configuration>

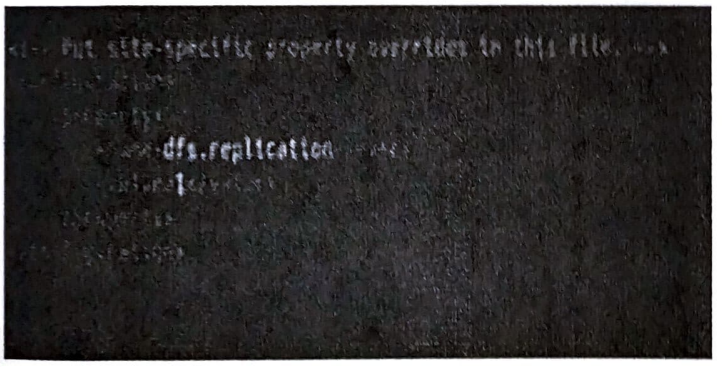
<property>

<name>dfs.replication</name>

<value>1</value>

</property>

</configuration>



Step 9: Go to mapred-site.xml

Command: sudo nano mapred-site.xml

Paste these:

<configuration>

<property>

<name>mapreduce.framework.name</name>

<value>yarn</value>

</property>

<property>

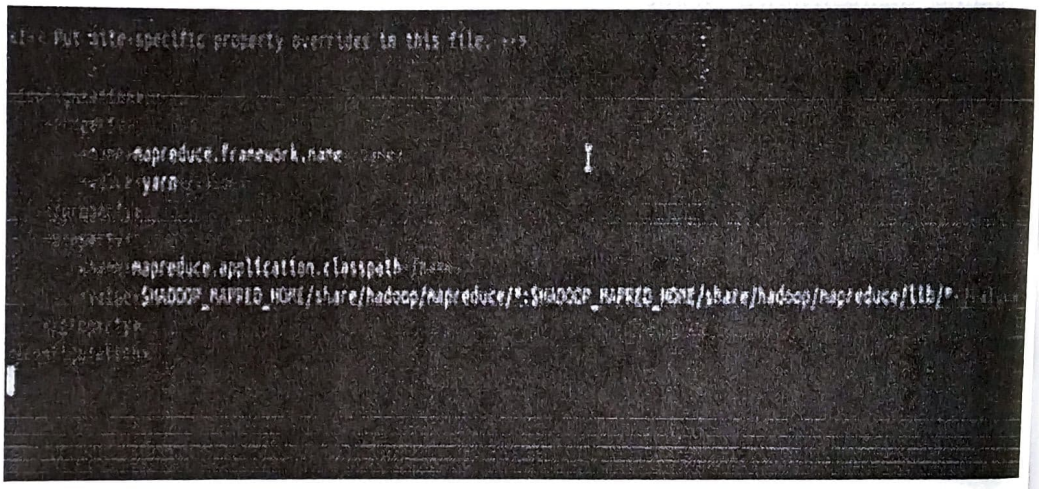
<name>mapreduce.application.classpath</name>

<value>$HADOOP_MAPRED_HOME/share/hadoop/mapreduce/*:$HADOOP_MA
PRED_HOME/share/hadoo

p/mapreduce/lib/*</value>

</property>

</configuration>



Step 10: Go to yarn-site.xml

Command: sudo nano yarn-site.xml

Paste these:

<configuration>

<property>

<name>yarn.nodemanager.aux-services</name>

<value>mapreduce_shuffle</value>

</property>

<property>

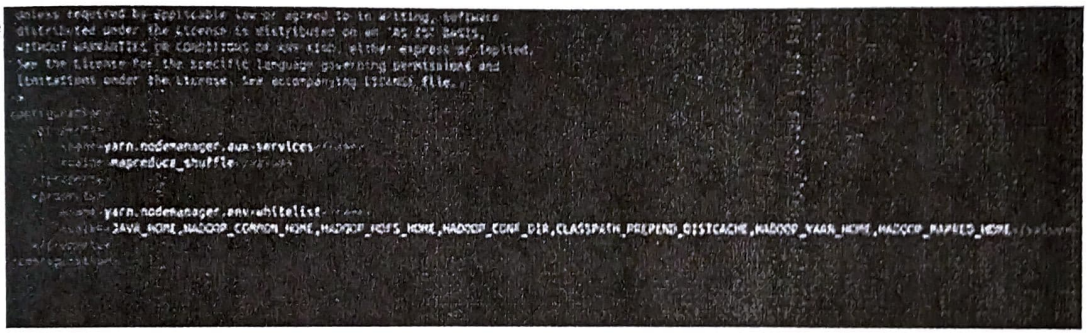
<name>yarn.nodemanager.env-whitelist</name>

<value>JAVA_HOME,HADOOP_COMMON_HOME,HADOOP_HDFS_HOME,H
ADOOP_CONF_DIR,CLASSPATH_PREP

END_DISTCACHE,HADOOP_YARN_HOME,HADOOP_MAPRED_HOME</valu
e>

</property>

</configuration>

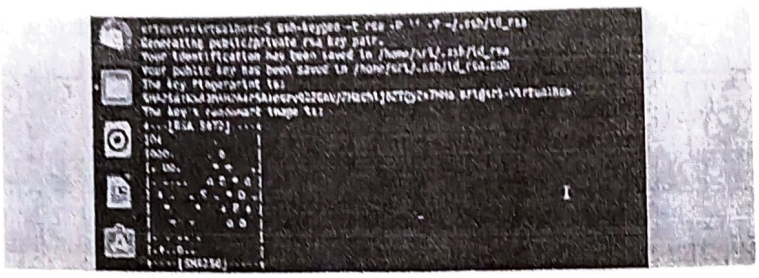


Step11:Establish Localhost:

Command: ssh localhost

Step 12: Key generation:

Command: ssh-keygen -t rsa -P '' -f ~/.ssh/id_rsa



Step 13: Granting Permission to the file

Command: chmod 0600 ~/.ssh/authorized_keys

Command:~/Downloads/hadoop-3.2.1/bin/hdfsnamenode–format

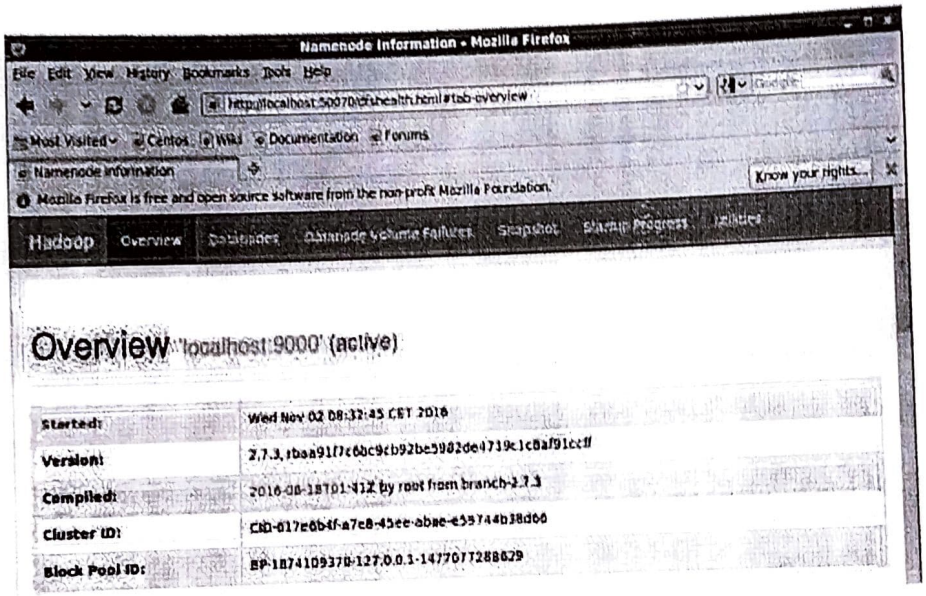
Step 14: Export pdsh

Command: export PDSH_RCMD_TYPE=ssh

Step 15:dfs node:

Command:~/Downloads/hadoop-3.2.1/sbin/start-dfs.sh

Step 16: Open the browser: Type **localhost:9870**



RESULT:

Thus the process to install hadoop single node cluster is done and output is obtaine

Ex.No.06 **Find a procedure to transfer the files from one virtual machine to another virtual machine.**

12/10/21

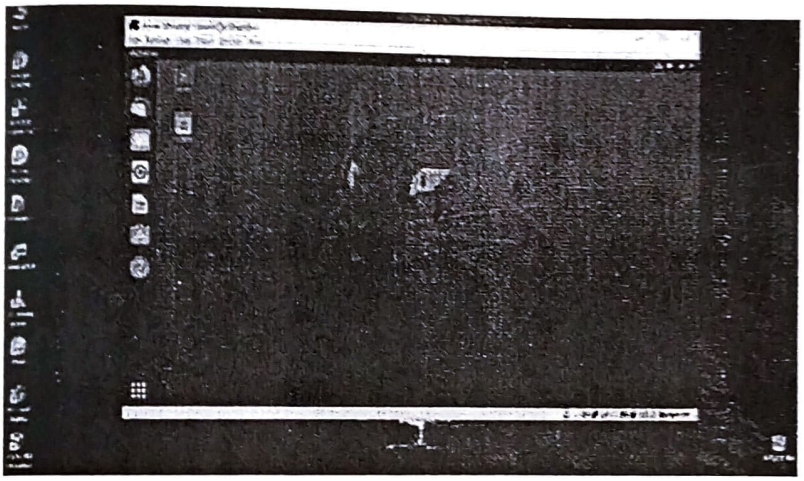
AIM:

To find a procedure to transfer the files from one virtual machine to another virtual machine.

PROCEDURE:

1. Download the virtual Box in your Host OS and Install the Guest OS in the virtual box.

2. First we will share a folder from host machine to one vm. Create a folder in the Host Machine.

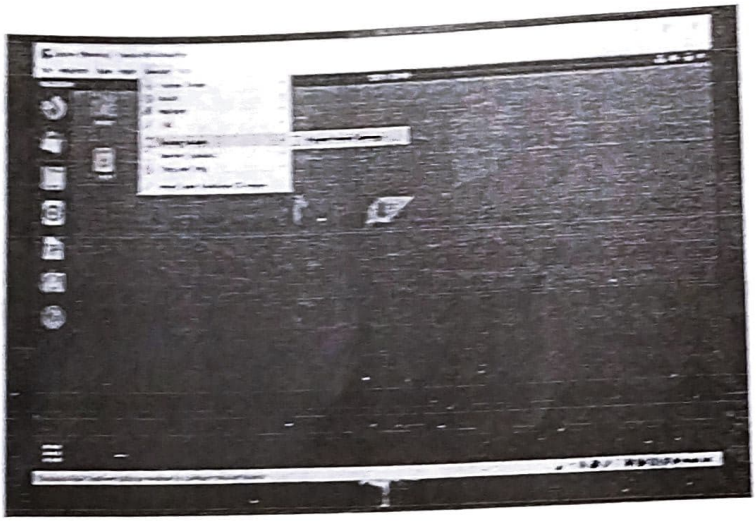


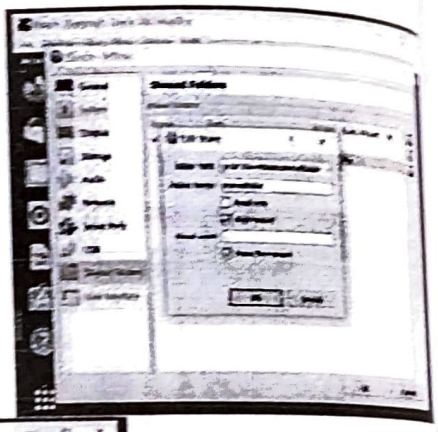
3. Install the vm and download the necessary files and then install another vm say vm2 and download the necessary files.

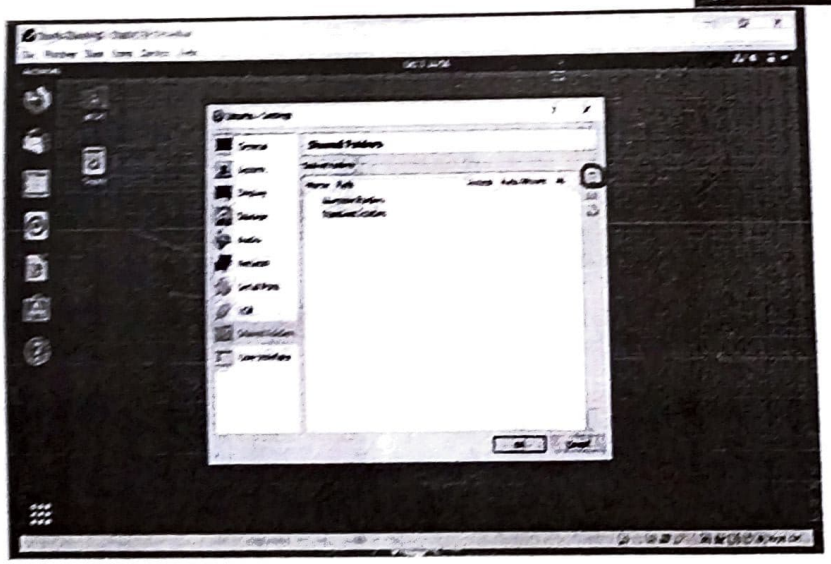
4.Now run the vm and Go to **Device->Insert Guest additional CD image** option and install the CD image.

And eject the CD image this helps in the access of file from one vm to another.

5.Go to **Device->Shared Folder->Shared Folder Settings** and a dialog box appears.



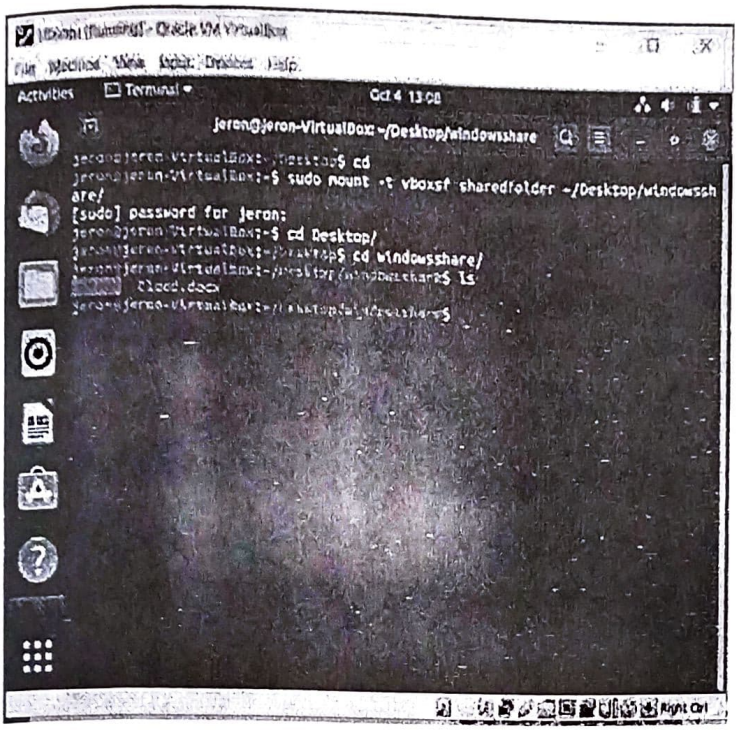




6.Click on the AddFileas marked in the above picture and give the directory of a sharefolder in the Host machine and click ok

7.Now open **terminal** and create a folder of your choice with the command**sudomkdir ~/Desktop/windowsshare**in vm,the folder with windowss

will be created in the vm desktop. And type **sudo mount -t vboxsf "folder_name" ~/Desktop/windowsshare/** and enter.



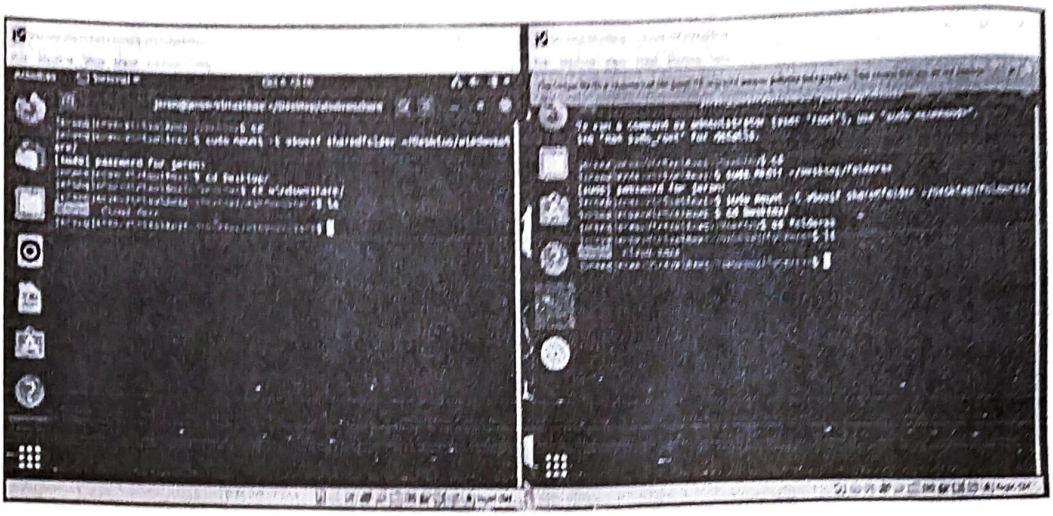
8.Now, we can access the shared file in the vm. Now to share folder from one vm to another.

9.Create a file inside the folder windowsshare of vm and Run the vm2 and do step 4 to 6.

10. Now open the **terminal** in vm2 and create a folder of your choice as step 7.

11.Now type **sudo munt -t vboxsf "filename" ~/Desktop/"folderinvm2"**

12.Now enter and view the folder and the folder in the vm 1 will be seen in vm2



RESULT

Thus program to find a procedure to transfer the files from one virtual machine to another virtual machine.

Ex. No 7
26/10/21

CLOUD SIM INTO ECLIPSE

AIM

To execute cloud sim into eclipse

What is a Cloudsim?

- A frame work made on java
- Simulates cloud services
- Collection of java classes
- It Models DataCentre, Host, VM, Cloudle

DataCentre:

- represents complete hardware
- it has set of hosts(Physical machines)

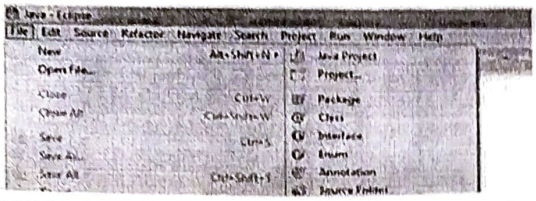
Host:

- physical machine
- it has variables to represent memory, processors, Id, scheduling scheme, etc.

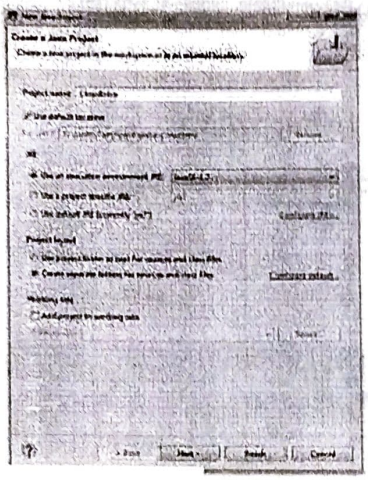
PROCEDURE:

STEP BY STEP INSTALLATION OF CLOUD SIM INTO ECLIPSE

1. Open up Eclipse and go to Menu Section, then click File, keep on clicking New and finally select java project.

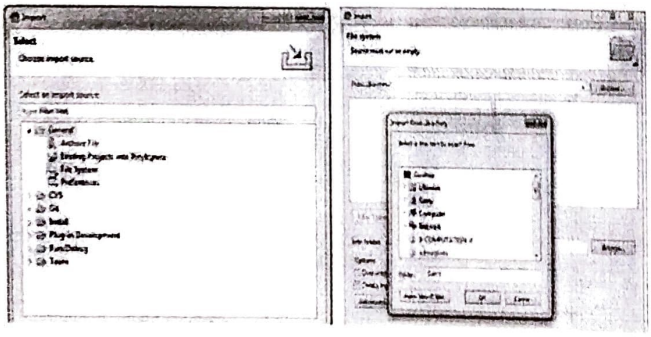


2. A new window will get open. Put a foot on to the following steps:-
   2.1. Enter project name. (I have named it as CloudIntro)
   2.2 In the next line you will see the path where your project will be created.
   2.3 Next You need to select the JRE environment.
   2.4 Finally Click Finish.

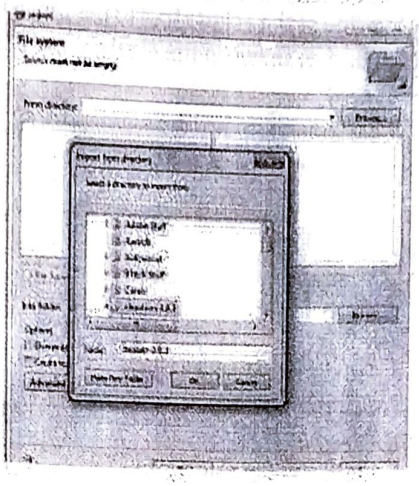


4. Next step is to go to the project CloudIntro, right click on it. Click Import as shown.

5. A new window will get open, now click File System as demonstrated in the Figure.
6. Next Step is to go to the directory where you have extracted your cloudsim tool. Figure6 is shown to guide you to get into the directory where your cloudsim folder is located.

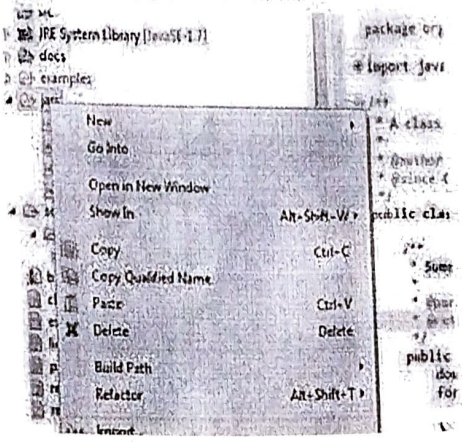


7. Select the cloudsim and click Finish as shown in the Figure

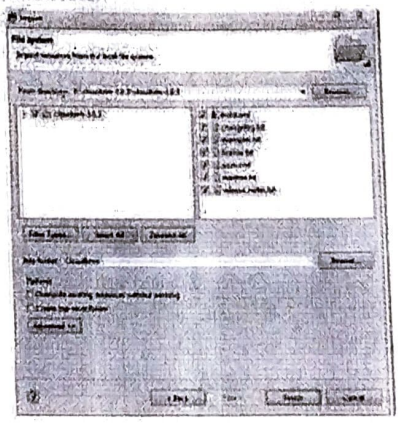


8. Now go to the link http://commons.apache.org/proper/commonsmath/download_math.cgi. Download the file named as "commons-math3-3.4.1-bin.zip". Unzip this file. We need jar files for math functions.

9. Now go to the left side of the eclipse tool in the project bar. Go to jar and right click on it. Click import as shown in the Figure.



10. Now go to the folder where you have placed the downloaded and extracted file as described by point 8. Then all you have to do is select that jar file and hit finish as shown by the Figure.



11. Finally the cloud sim is installed into your Eclipse environment.

RESULT

Thus the process of CloudSim into eclipse is done and output is obtained

Ex. no. 8 Installing Ubuntu in a VMware

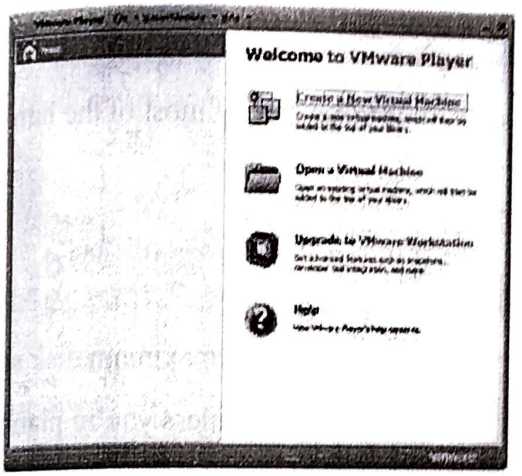
26/10/21

AIM:

To install Ubuntu in a VMWare

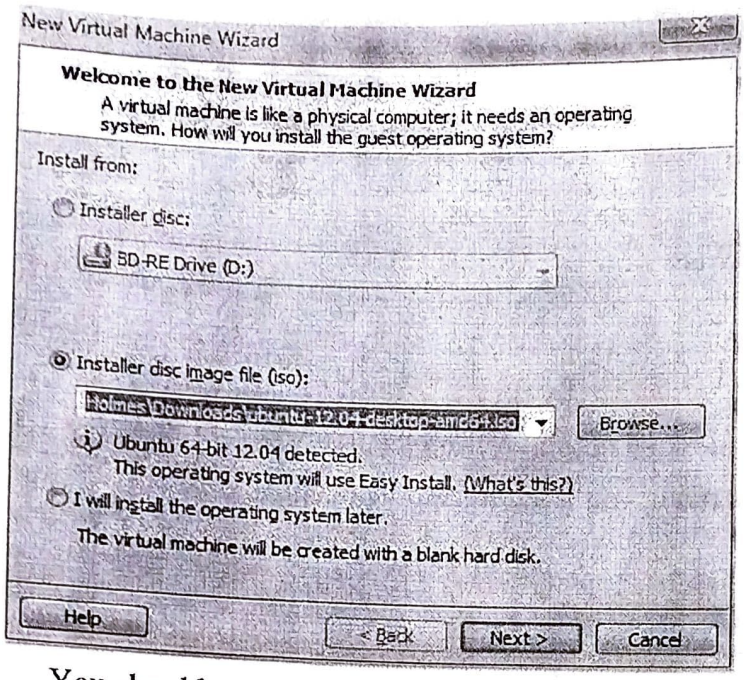
PROCEDURE:

1. Download the Ubuntu iso (desktop not server) and the free VMware Player.
2. Install VMware Player and run it, you'll see something like this:



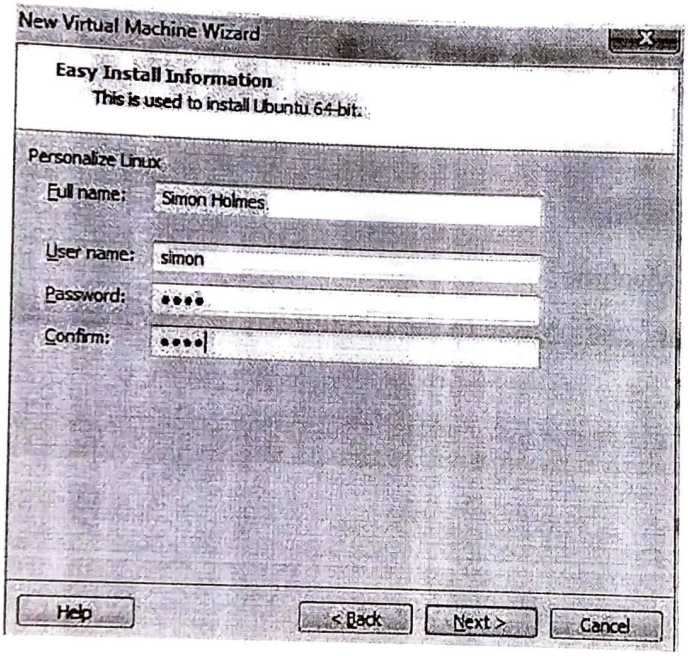
3.Select "Create a New Virtual Machine"

4.Select "Installer disc image file" and browse to the Ubuntu iso you downloaded.

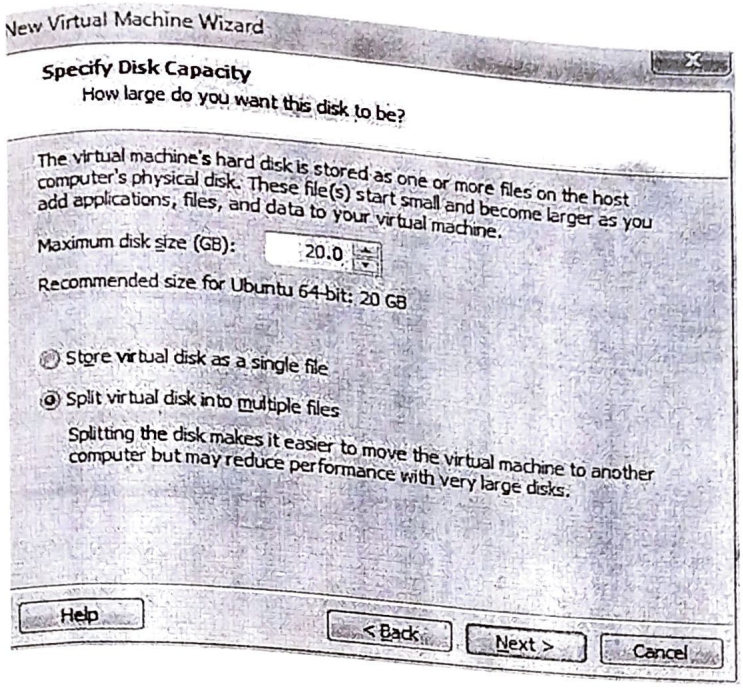


You should see that it will use Easy Install – this takes care of most of the hard work for you. Click next

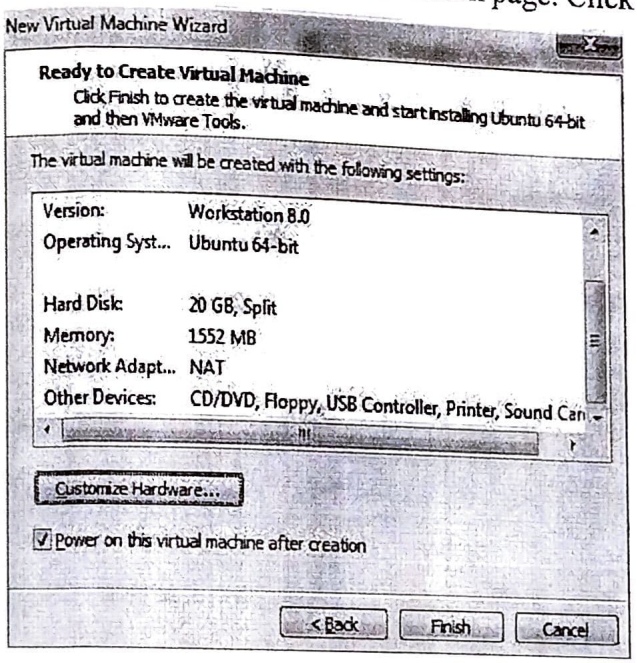
5.Enter your full name, username and password and hit next



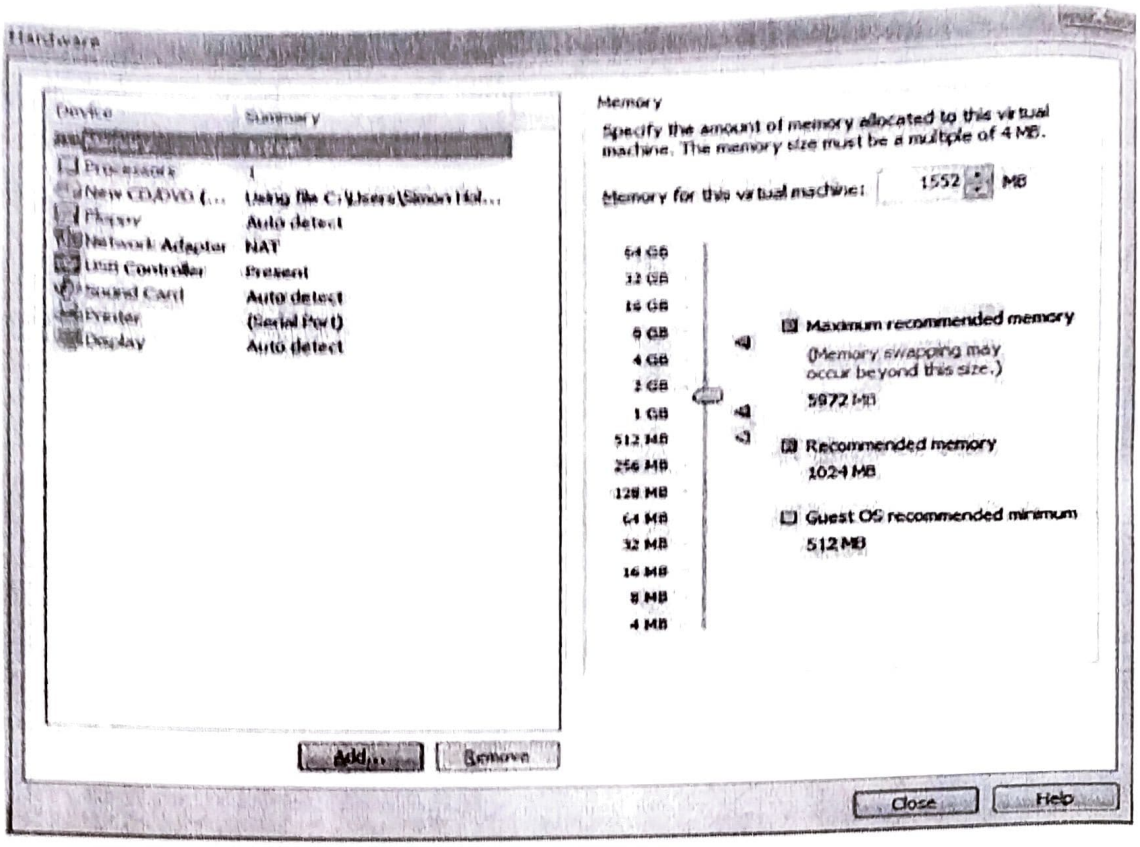
6.Select the maximum disk size and type. Unless you're planning on some really CPU intensive work inside the VM, select the "Split virtual disk into multiple files" option. Hit next when you're happy with the settings.



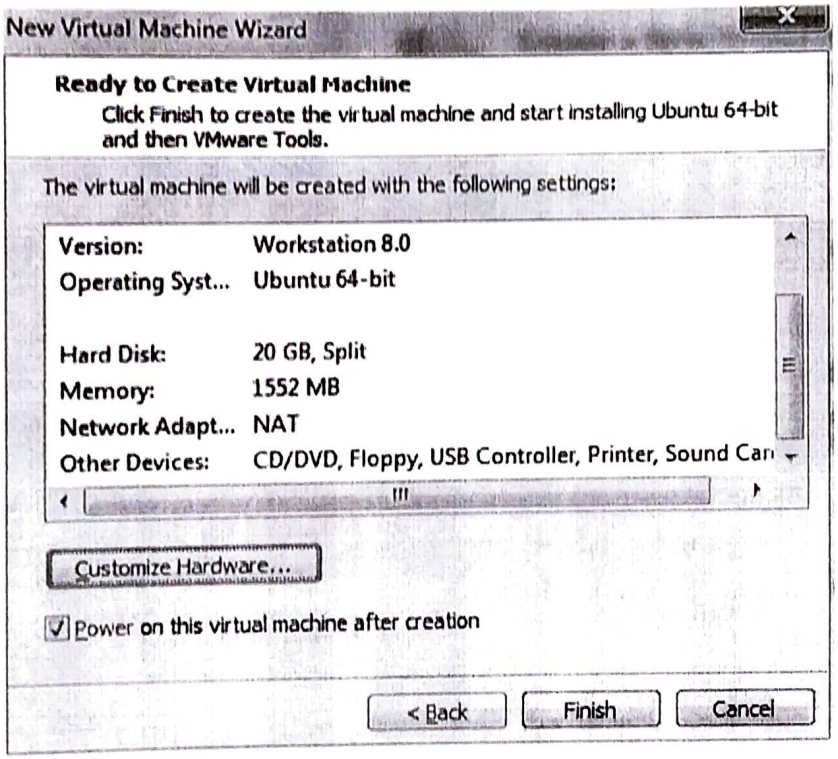
7.This brings you to the confirmation page. Click "Customize Hardware"



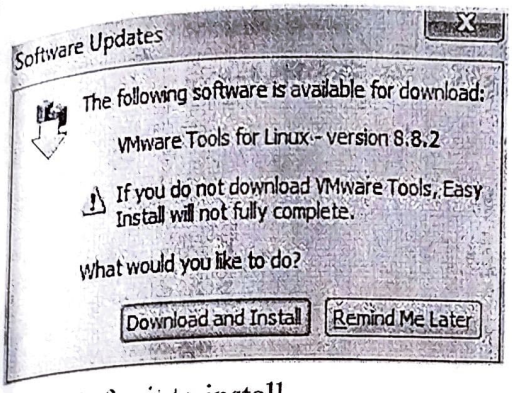
8.In the hardware options section select the amount of memory you want the VM to use. In this instance I've gone for 1.5GB out of the 8GB installed in my laptop. Leave everything else as it is and click Close.



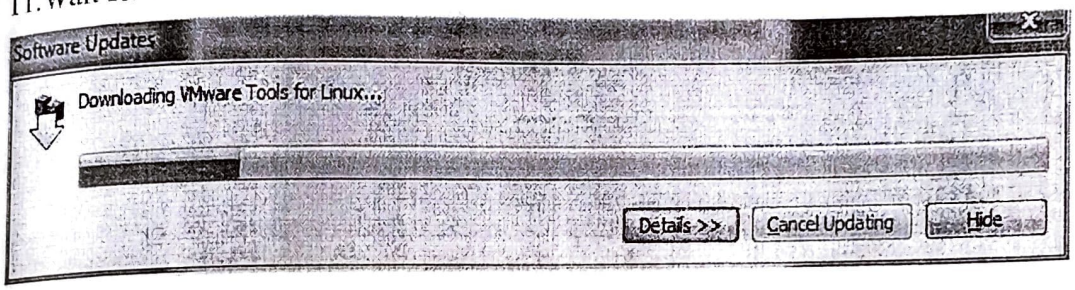
9.This brings you back to the confirmation page. Click Finish this time



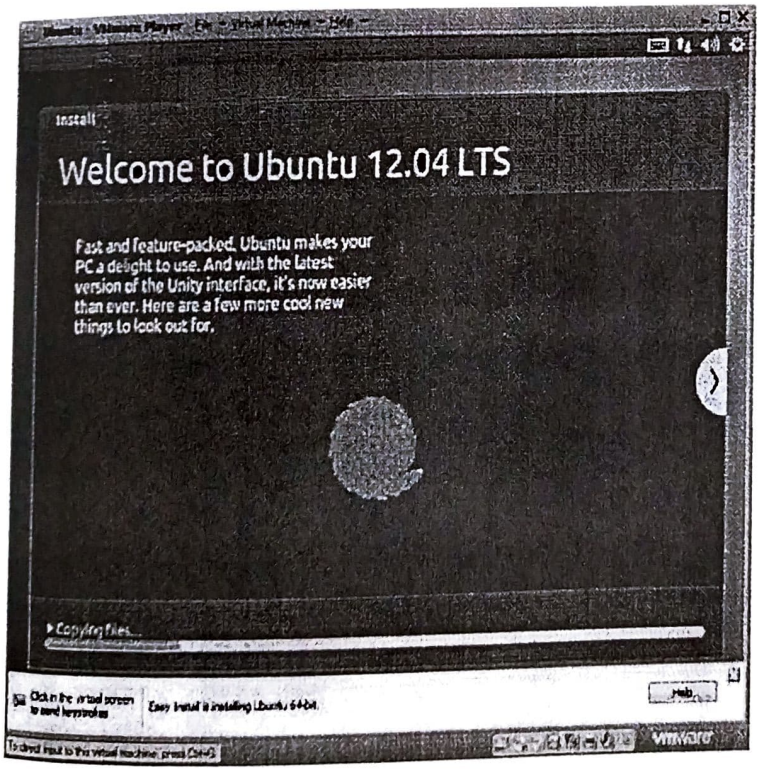
10. You will probably be prompted to download VMware Tools for Linux. Click "Download and Install" to continue



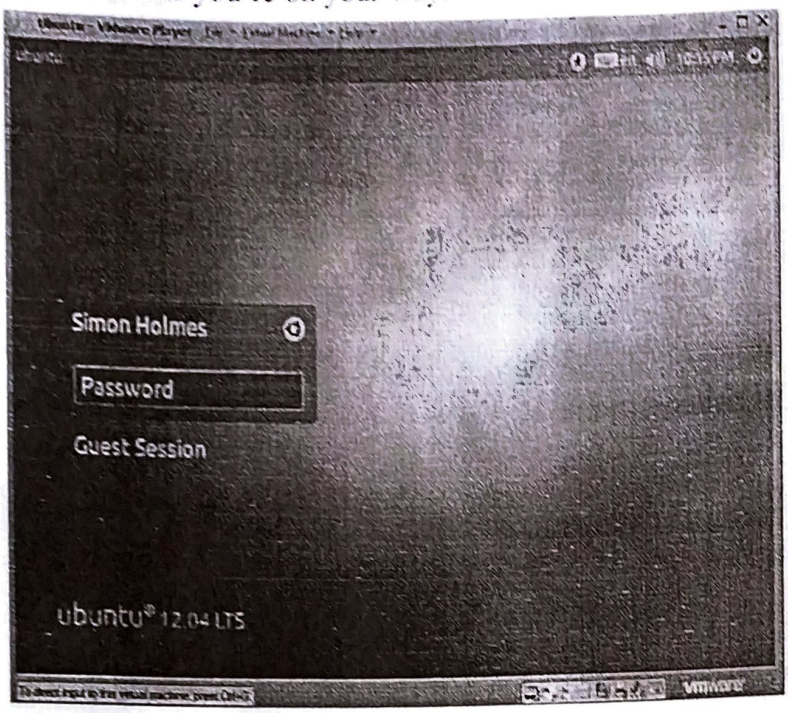
11. Wait for it to install



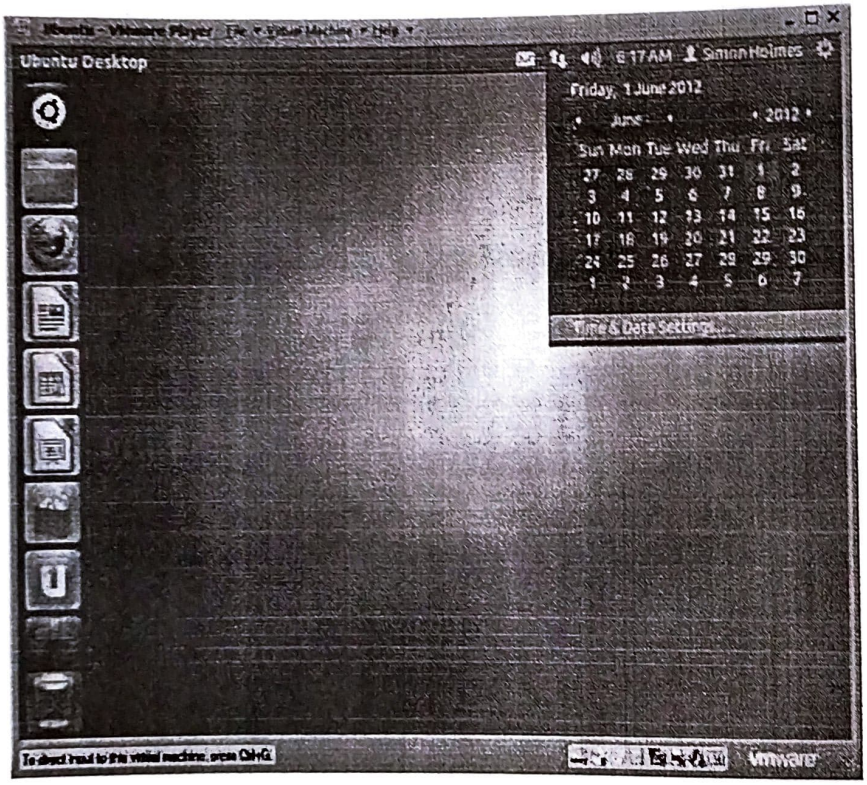
12. Ubuntu will then start to install, so keep waiting (or do what I did and go to bed!)



13.When all is done you'll be presented with the Ubuntu login screen. So enter your password and you're on your way.

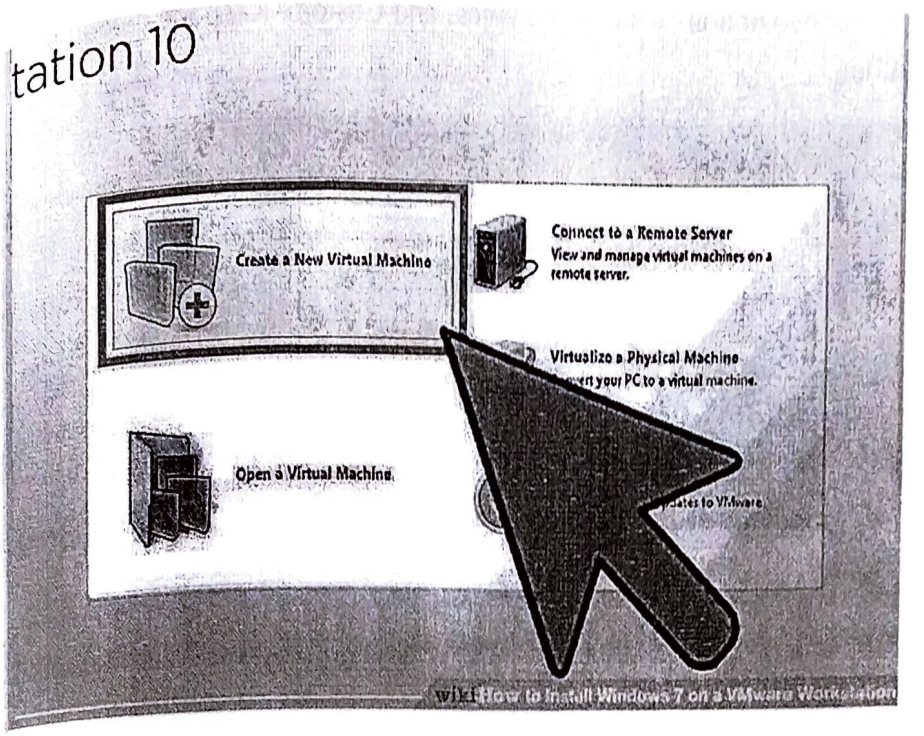


14.Click the clock in the top right to set your time and date settings

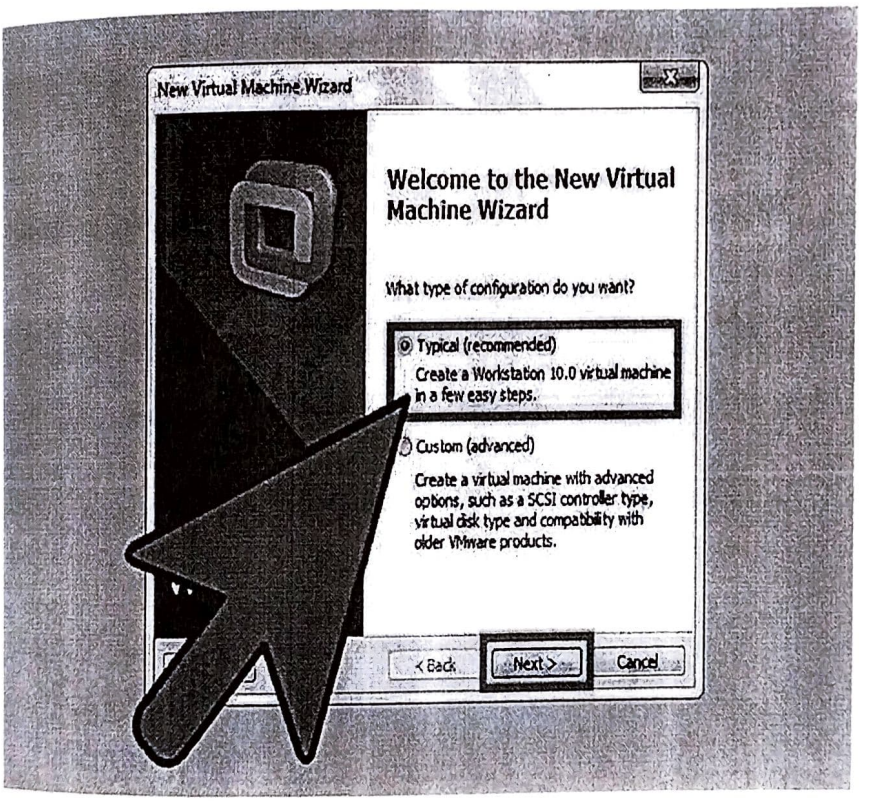


15.Once you've set that up, you're up and running with Ubuntu in VMware Play on your Windows machine. Congratulations and enjoy!

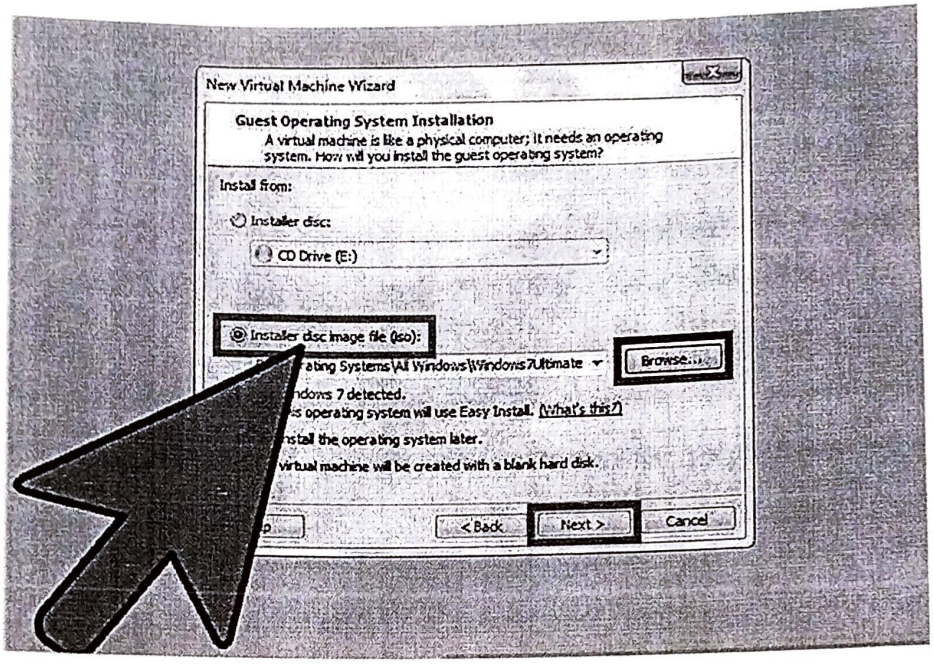
Installing Windows 7 in a VMware



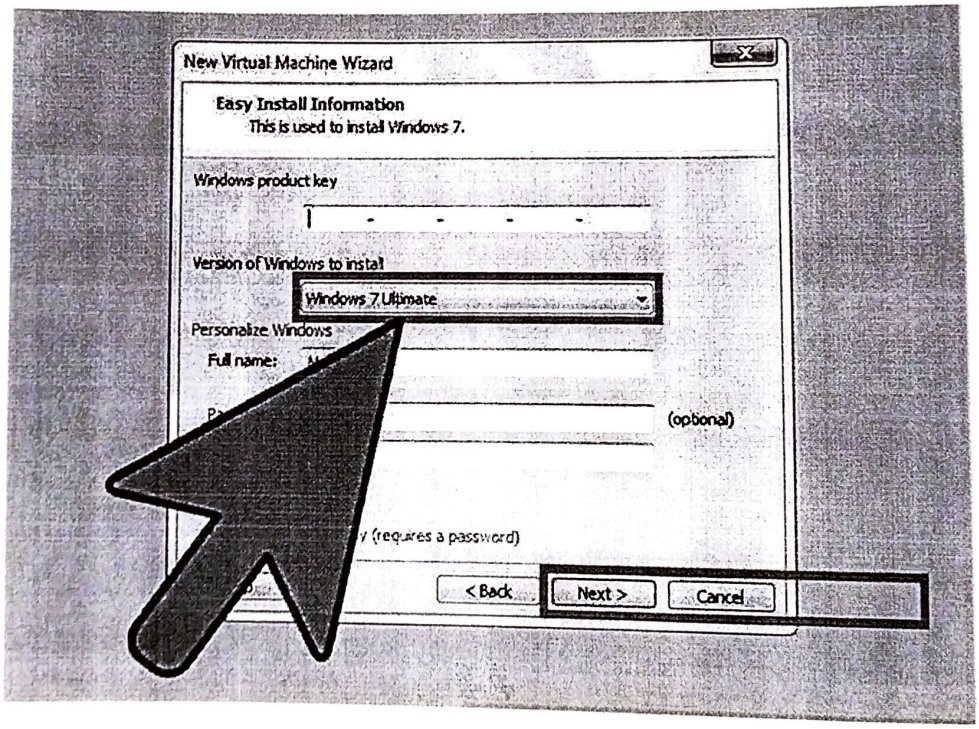
1.Create a new virtual machine. Once you open VMware Workstation, click "Create a New Virtual Machine".



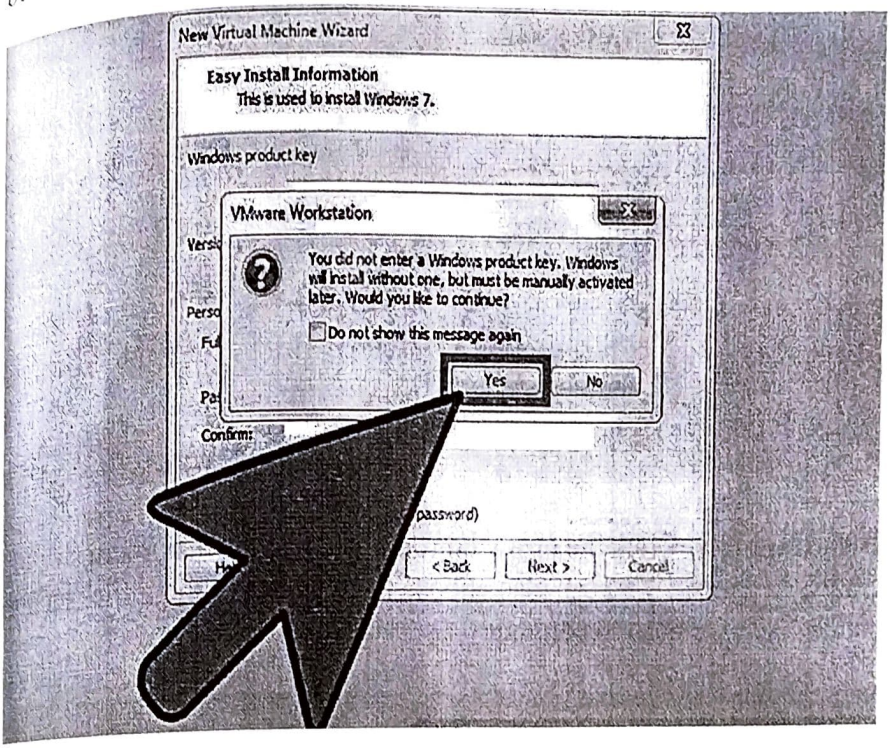
2.Select type of configuration. You will see a New Virtual Machine Wizard dialog box. There are two options which are Typical and Custom. Keep the default and click "Next" button.



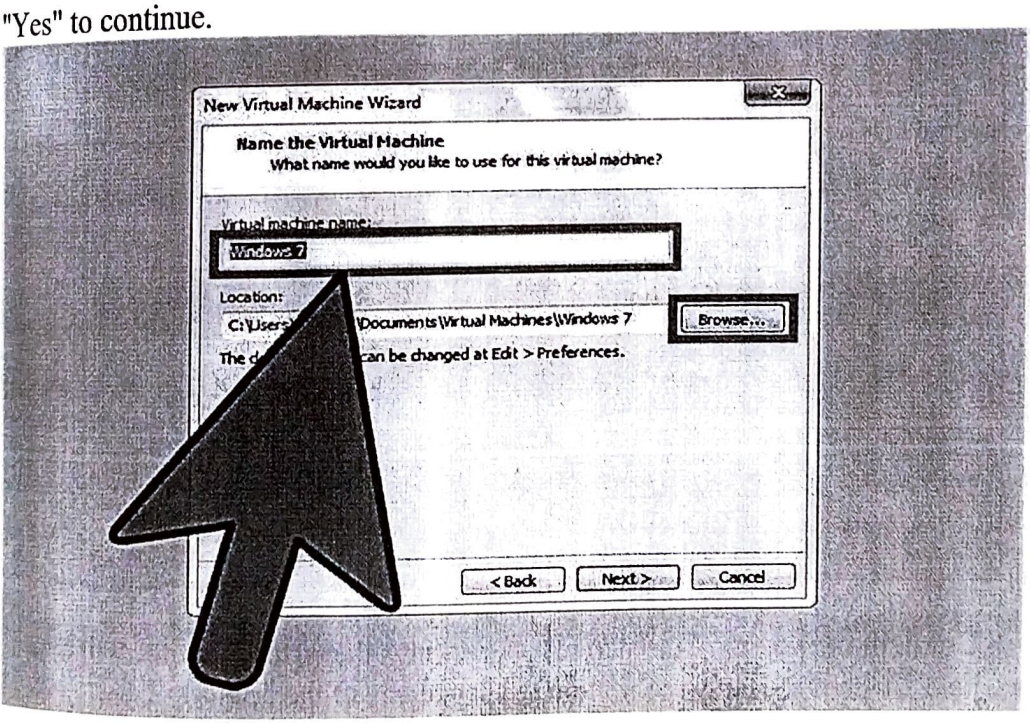
3.Choose "Installer disc image file". This type matches the iso file you download. Click "Browse" to locate your Windows 7 iso file. Then, click "Next".



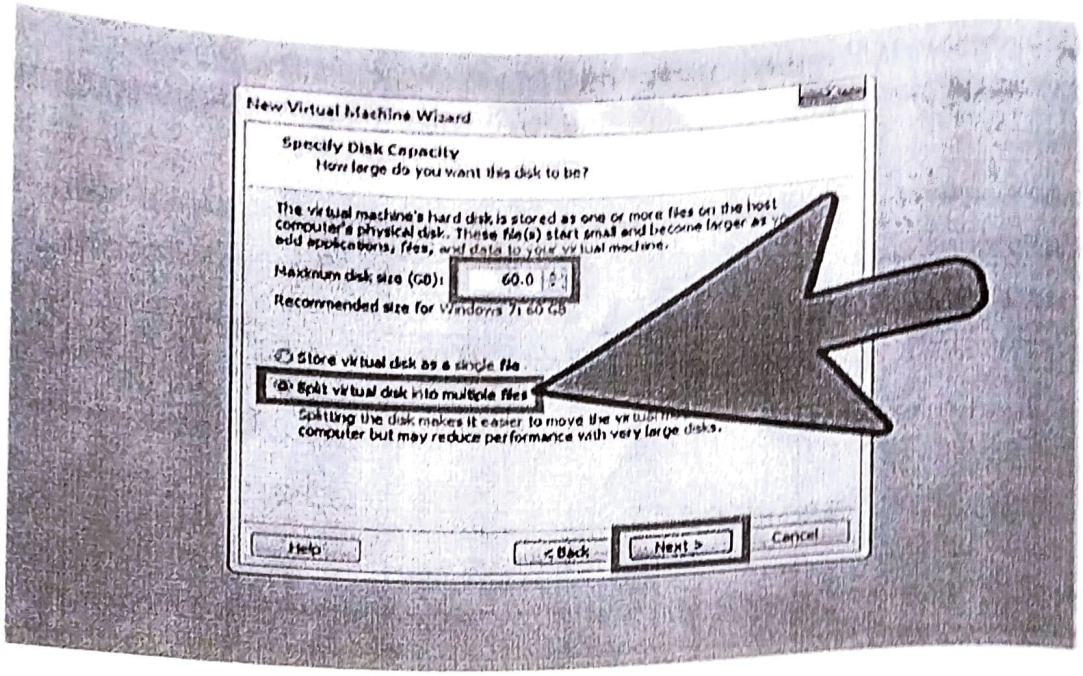
4.Select the version of Windows to install. The version depends on the iso file you download. You can set your product key and personalize Windows later. Click "Next" button to continue.



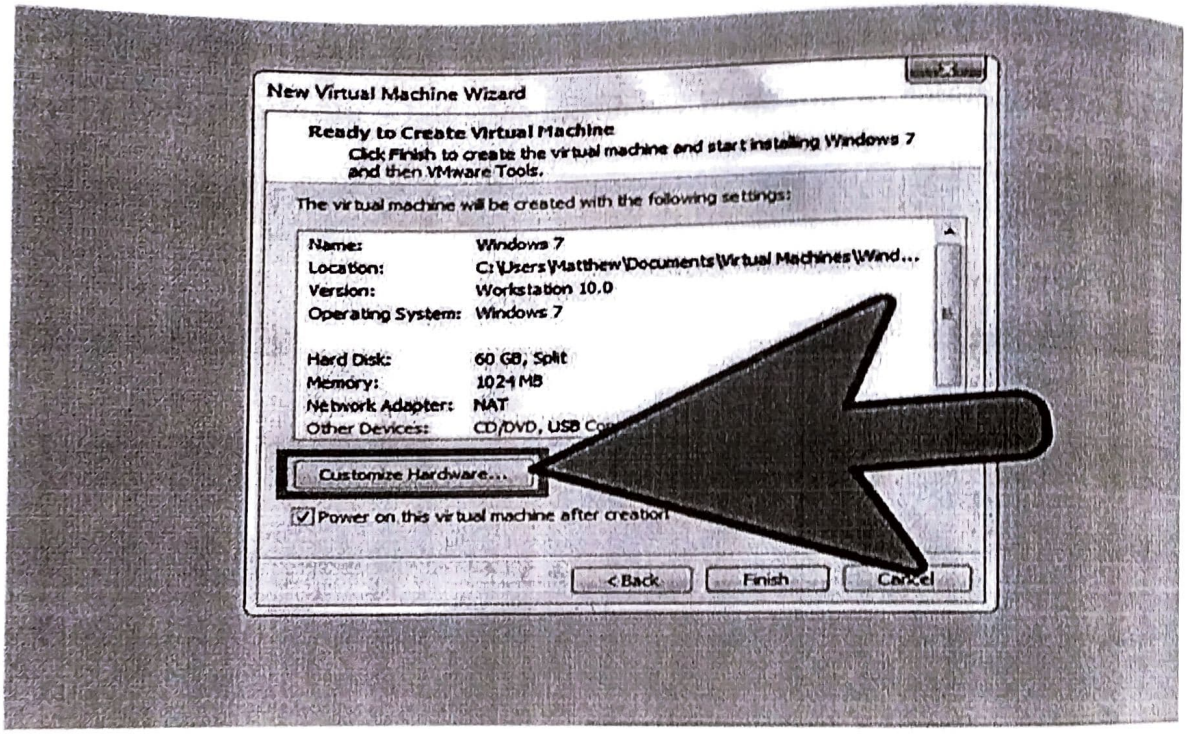
5.Wait for the dialog to pop up. If you do not enter the Windows product key, click "Yes" to continue.



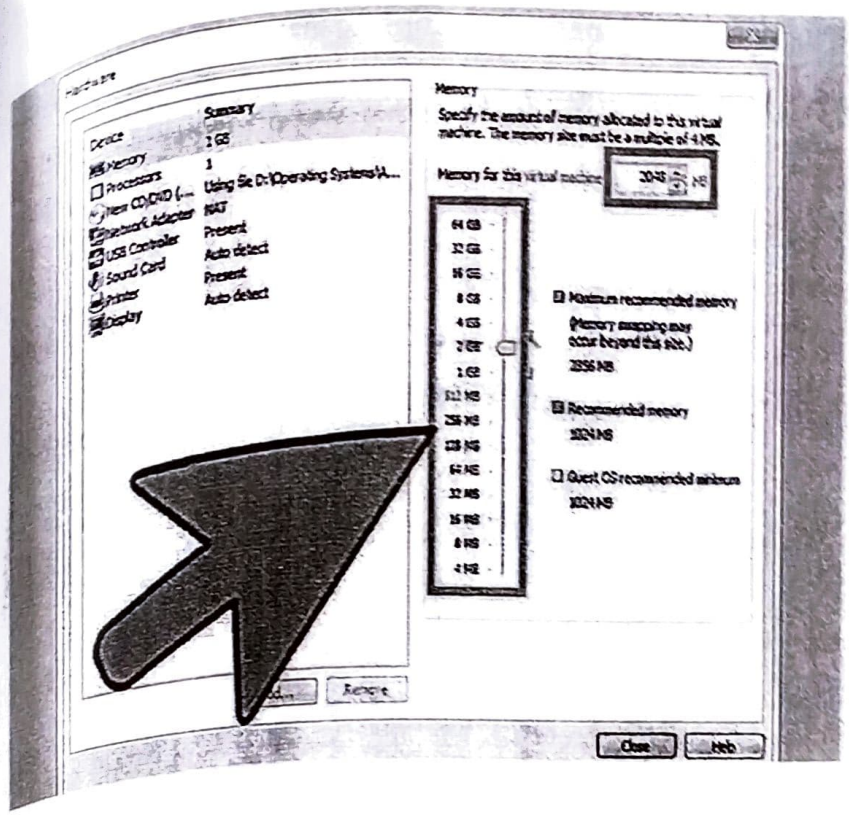
6.Name the virtual machine. Change the name and location if you want. Click "Browse" to modify the path. Then, click "Next".



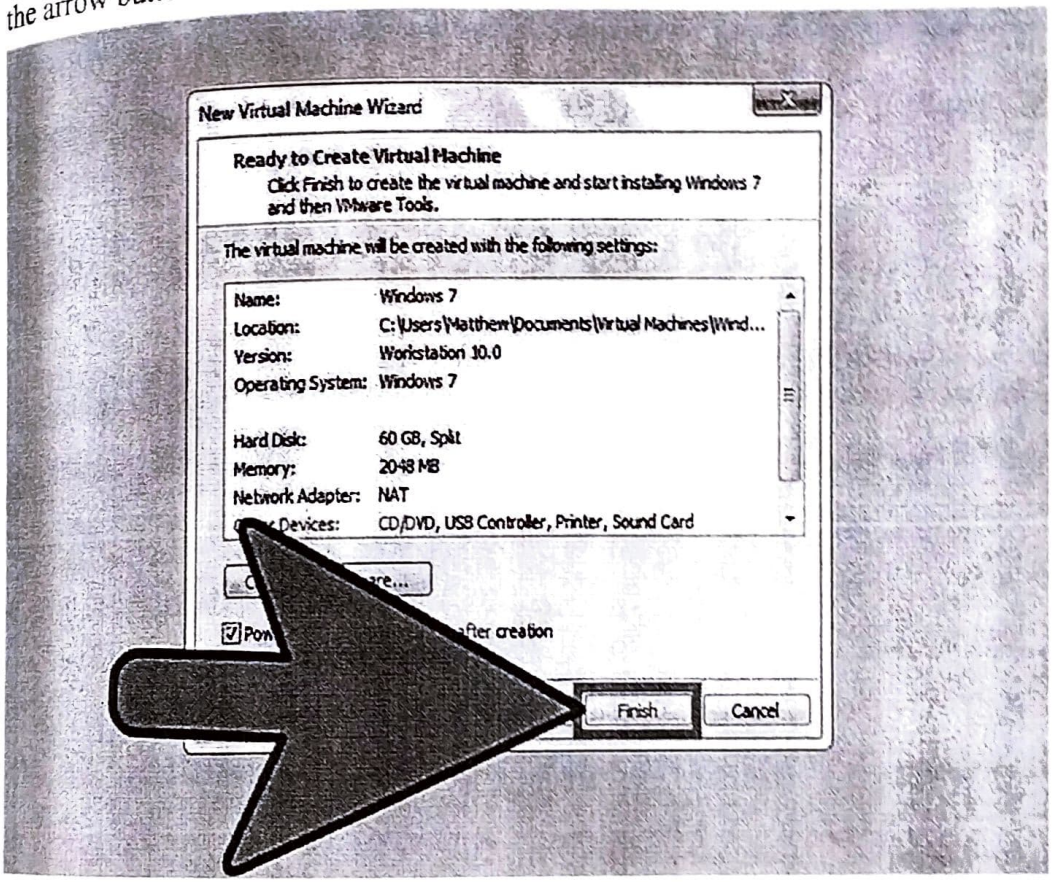
7.Specify Disk Capacity. Click the arrow button to change the maximum size of virtual machine's hard disk. You can also choose store as one or more files on host computer. Click "Next" button to continue.



8.Confirm the setting. This step lists the settings the virtual machine will create. Click "Customize Hardware" button to change any of the details.



9.Change Memory. If you want to change the memory of the virtual machine, select the arrow button or drag the slider tab. Click "Close" to go back to the last dialog box.



10.Create the new virtual machine. After confirming that the settings are all accurate, click the "Finish" button to start the process.

RESULT

Thus the process of installing ubuntu in a VMware is done and output is obtained.

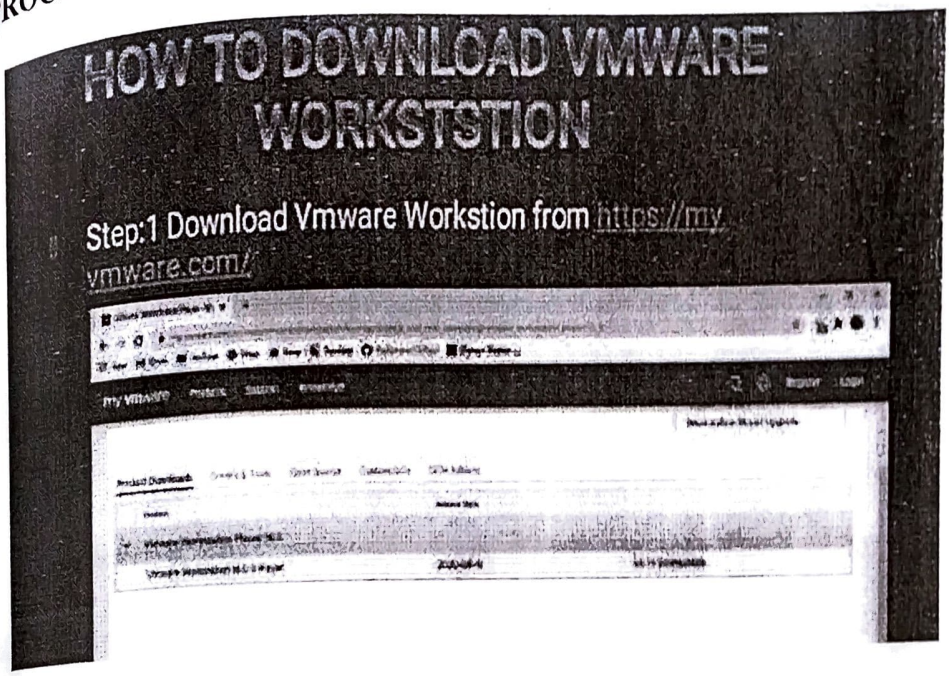
Ex.No. 9 INSTALL AND RUN C COMPILER IN UBUNTU

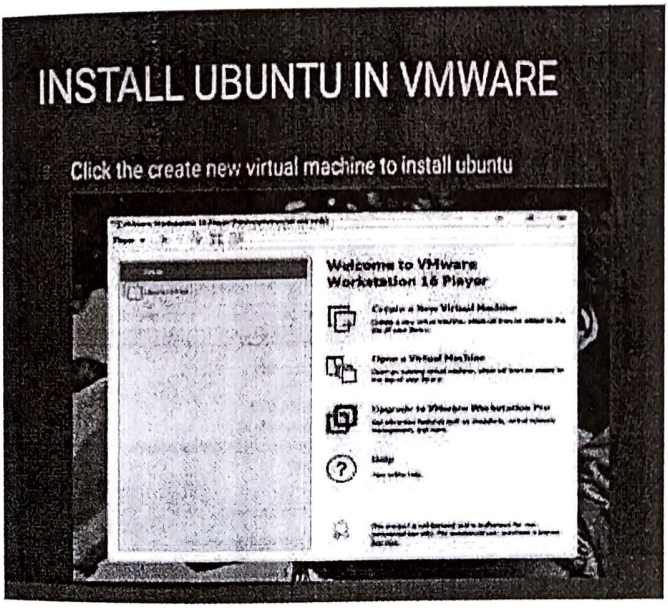
26/10/21

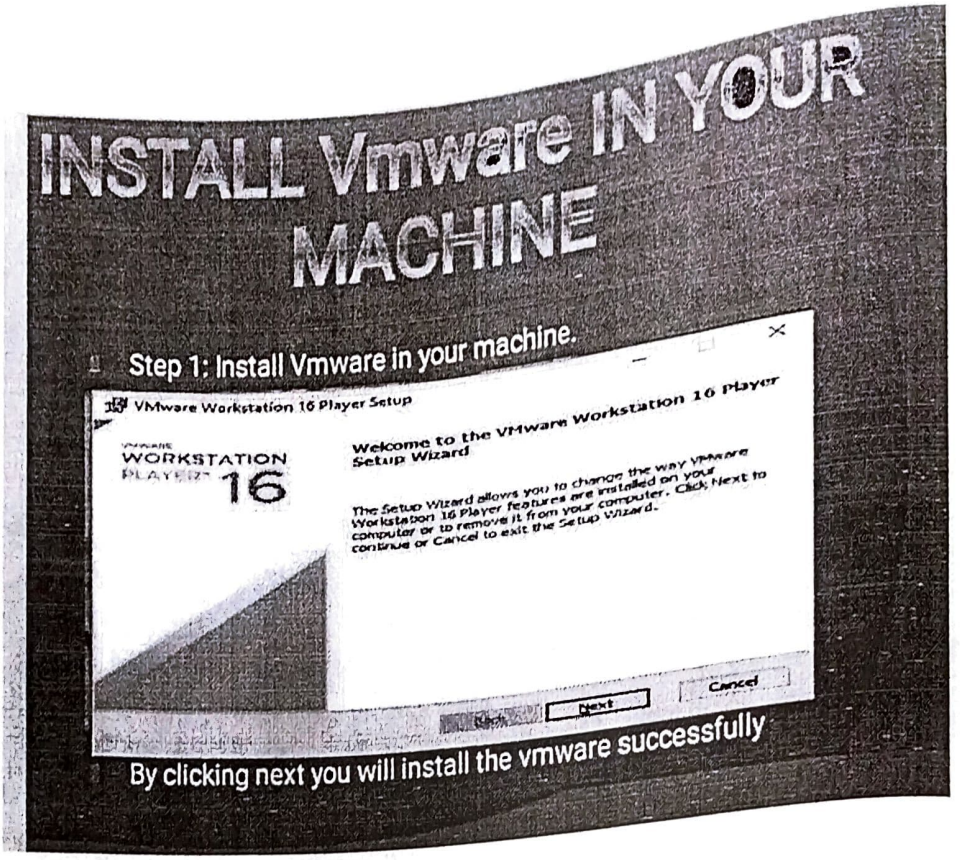
AIM:

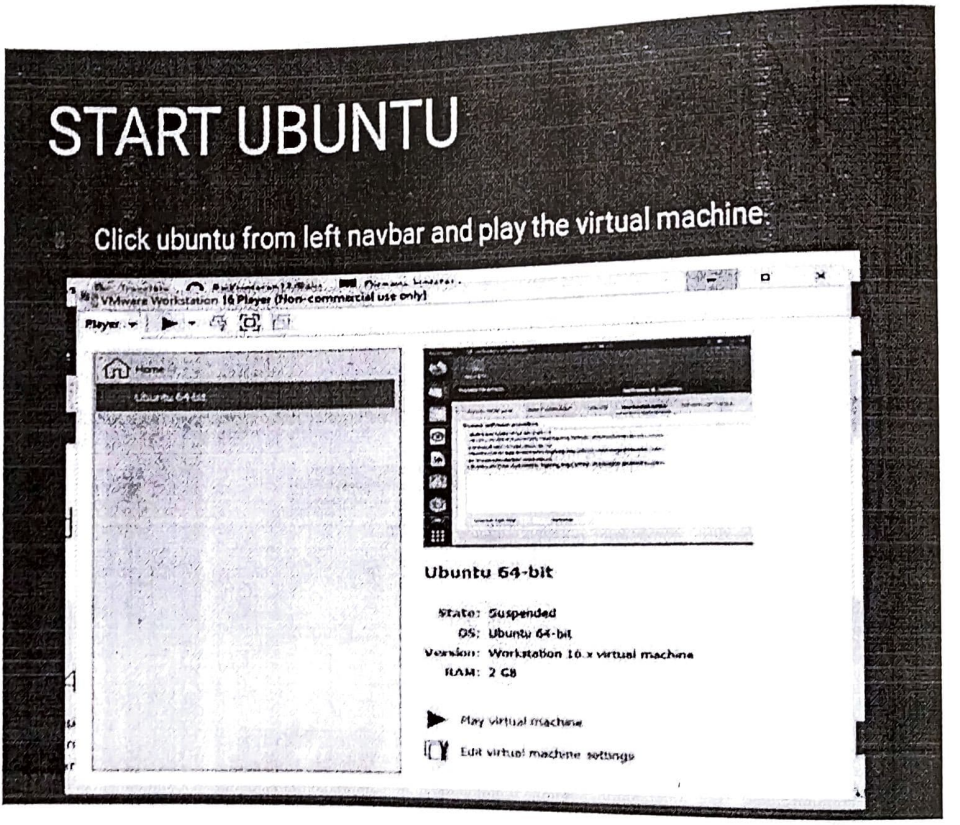
To install and run C compiler in ubuntu

PROCEDURE:



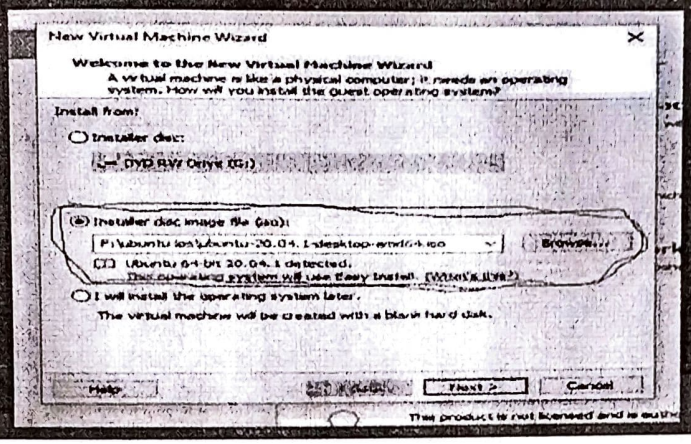



INSTALL Vmware IN YOUR MACHINE
Step 1: Install Vmware in your machine.
VMware Workstation 16 Player Setup
WORKSTATION 16 PLAYER
Welcome to the VMware Workstation 16 Player Setup Wizard
The Setup Wizard allows you to change the way VMware Workstation 16 Player features are installed on your computer or to remove it from your computer. Click Next to continue or Cancel to exit the Setup Wizard.
Next
Cancel
By clicking next you will install the vmware successfully


START UBUNTU
Click ubuntu from left navbar and play the virtual machine:
VMware Workstation 16 Player (Non-commercial use only)
Player
Home
Ubuntu 64-bit
Ubuntu 64-bit
State: Suspended
OS: Ubuntu 64-bit
Version: Workstation 16.x virtual machine
RAM: 2 GB
Play virtual machine
Edit virtual machine settings

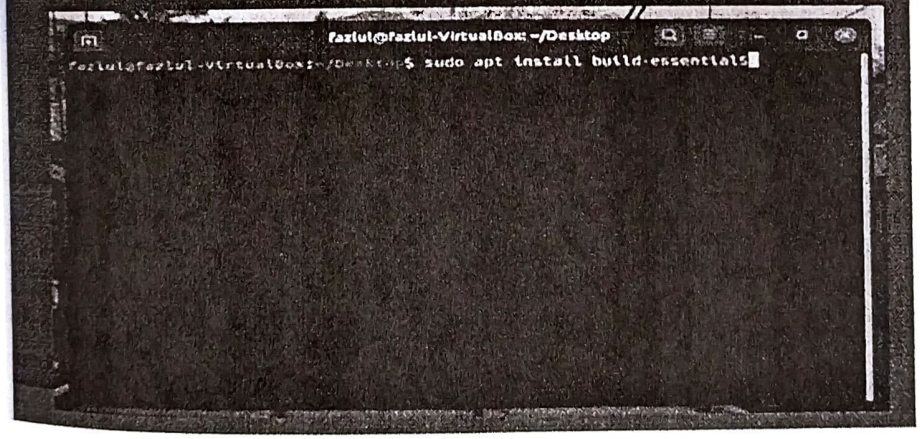
Step 1: click installer disc image file and locate the file directory.

Download UBUNTU iso file from https://ubuntu.com/download/desktop



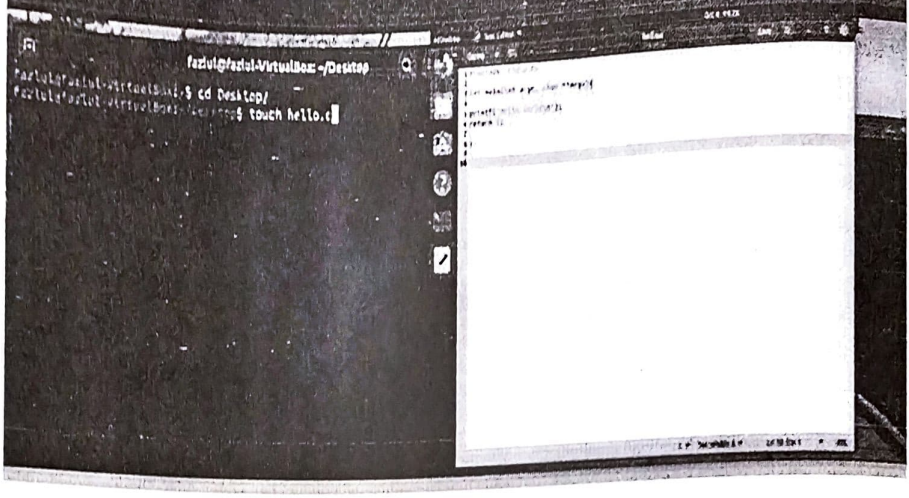
INSTALL C COMILER IN UBUNTU

1. Open terminal in ubuntu by Search box-Terminal-Open
2. Install GCC by typing this command in the terminal $ sudo apt install build essential
3. Success fully installed c compiler.

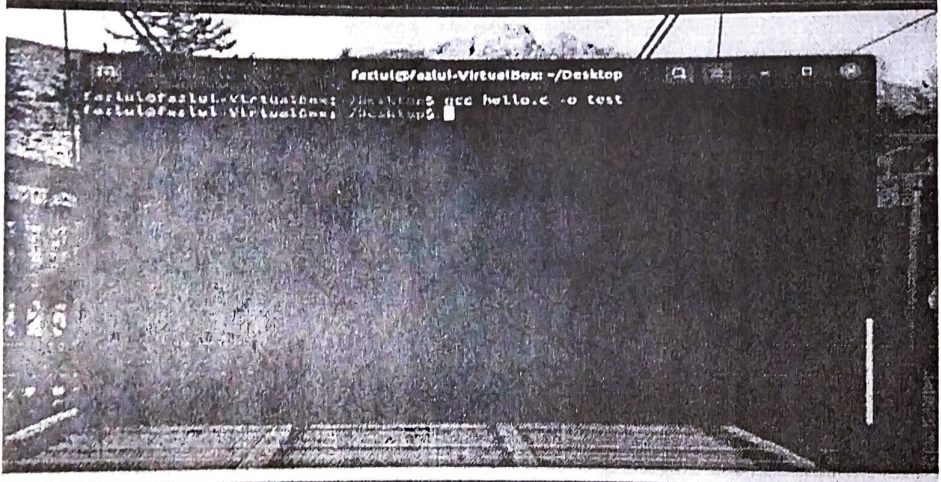


Create a C file using terminal

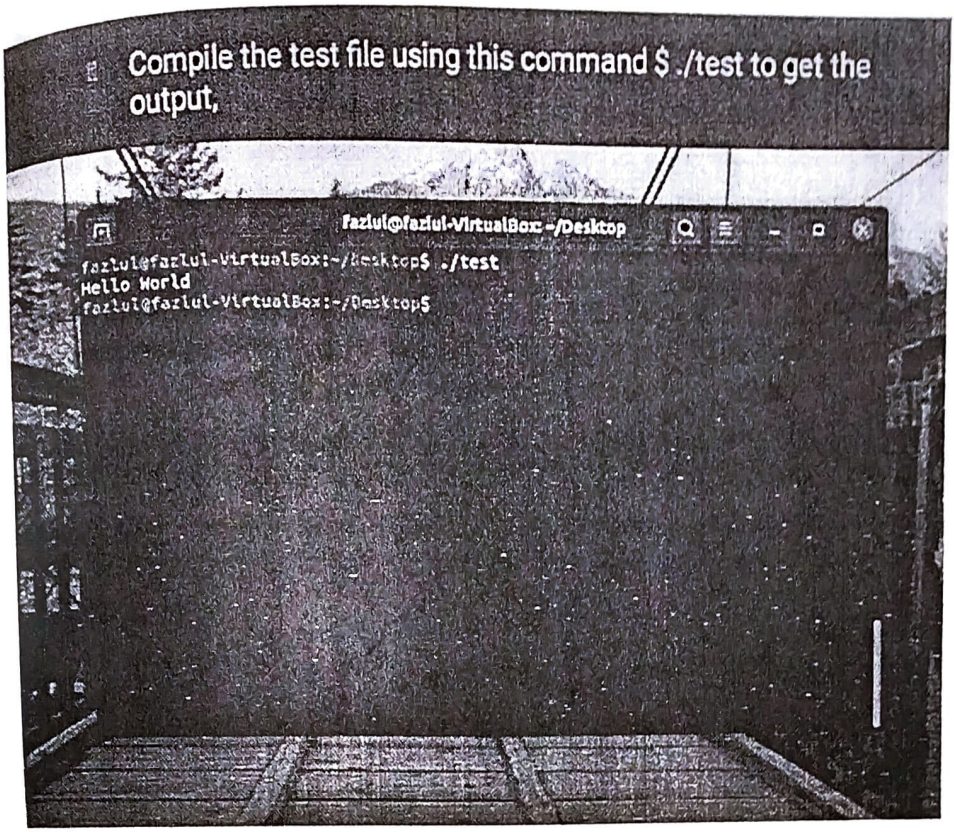
1. Type $ touch hello.c command in the terminal to create a C file.
2. Write the program.



1. Create a test file to view the output from the terminal using the following command $ gcc hello.c –o test
2. The test file will be created in file location.



3. Compile the test file using this command $ ./test to get the output.



RESULT

Thus the program to install and run c compiler in ubuntu is done and output is obtained

```
Sudo apt update
Sudo apt install build-essential
Sudo apt-get install man pages-dev
gcc --version
nano hello.c
gcc hello.c -o hello
./hello
```

Ex.No.10 SIMULATE CLOUD SCENARIO USING CLOUDSIM

2/11/21

AIM:-

Simulate a cloud scenario using CloudSim and run a scheduling algorithm that is not present in CloudSim.

PROCEDURE:-

After successful installation of CloudSim in your Eclipse, next part is to run a scheduling algorithm that is not present in CloudSim.

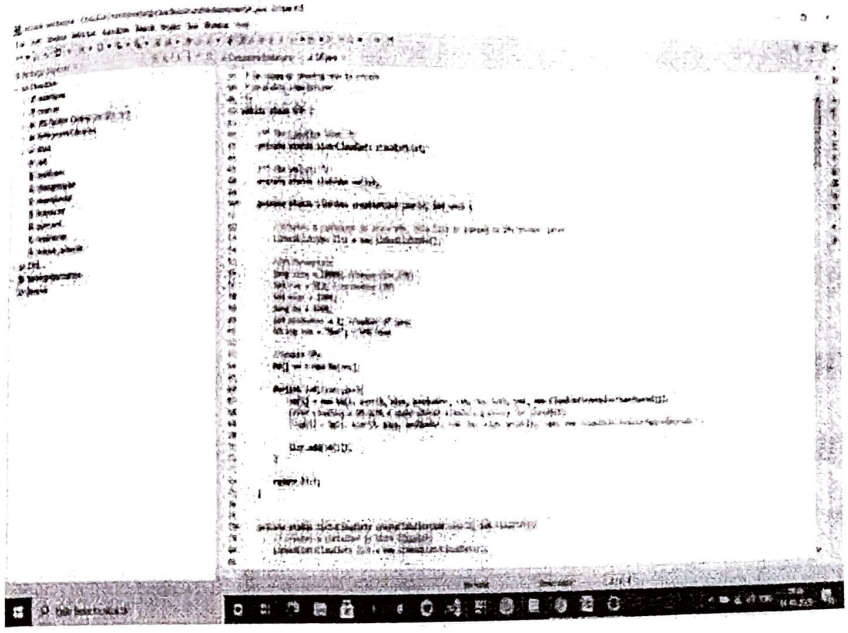
1. Choose any scheduling algorithm to run on Eclipse and Simulate on CloudSim, here ShortestJobFirst(SJF) algorithm is taken.

2. Create a Java File named ShortestJobFirst/ SJF

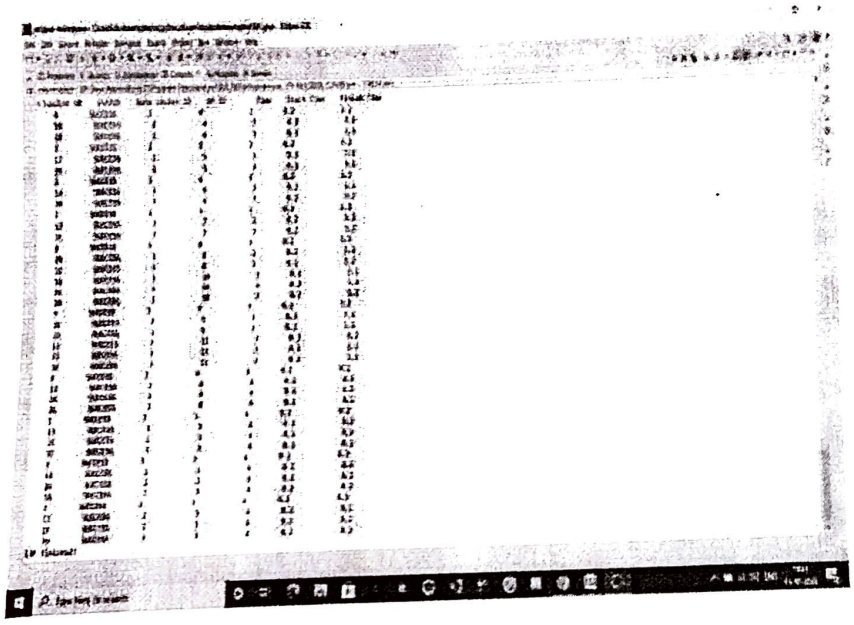
under the in-built package

org.cloudbus.cloudsim.eaxmple in the examples folder already present in the project and paste the SJF code for Simulation over the CloudSim.

3. Select SJF.java and run the application, building the files and simulation output will take few minutes.



This refers to the successful simulation of our own scheduling algorithm simulated over the CloudSim.



RESULT

Thus a process to simulate a cloud scenario using CloudSim and run a scheduling algorithm that is not present in CloudSim

Ex.No. 11

2/11/21

Executing HELLO WORLD program in Google App Engine.

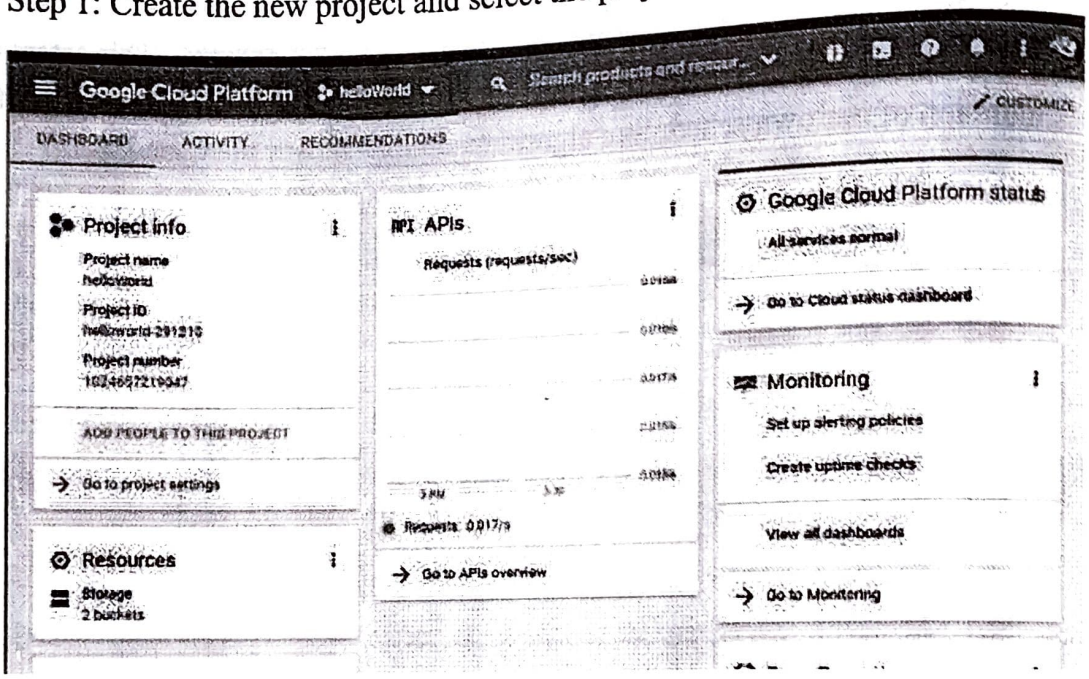
AIM:

To execute HELLO WORLD program in Google App Engine

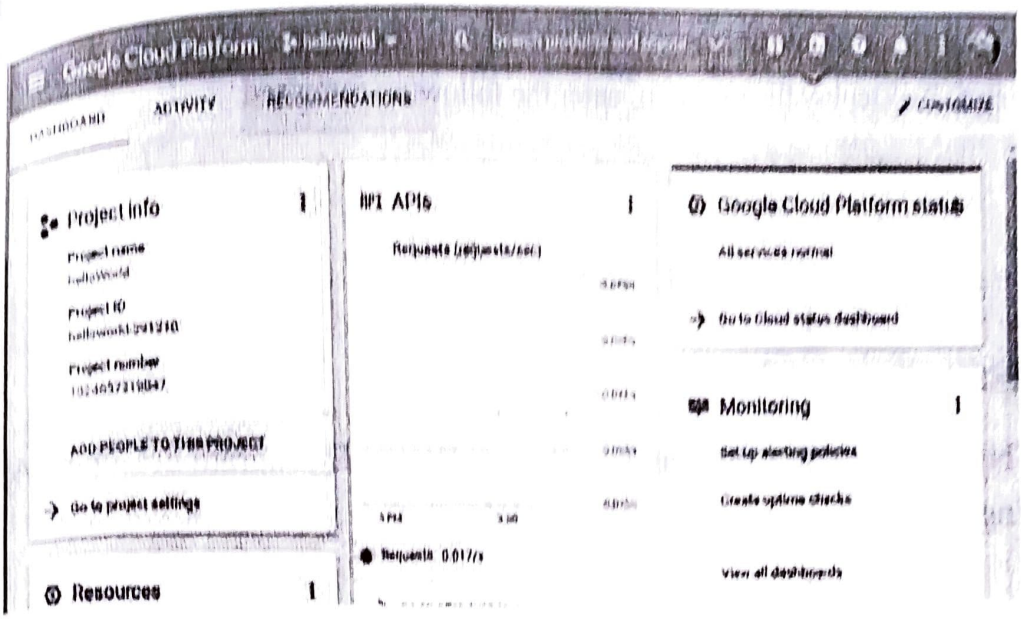
PROCEDURE:

Step 0: visit https://console.cloud.google.com/

Step 1: Create the new project and select the project



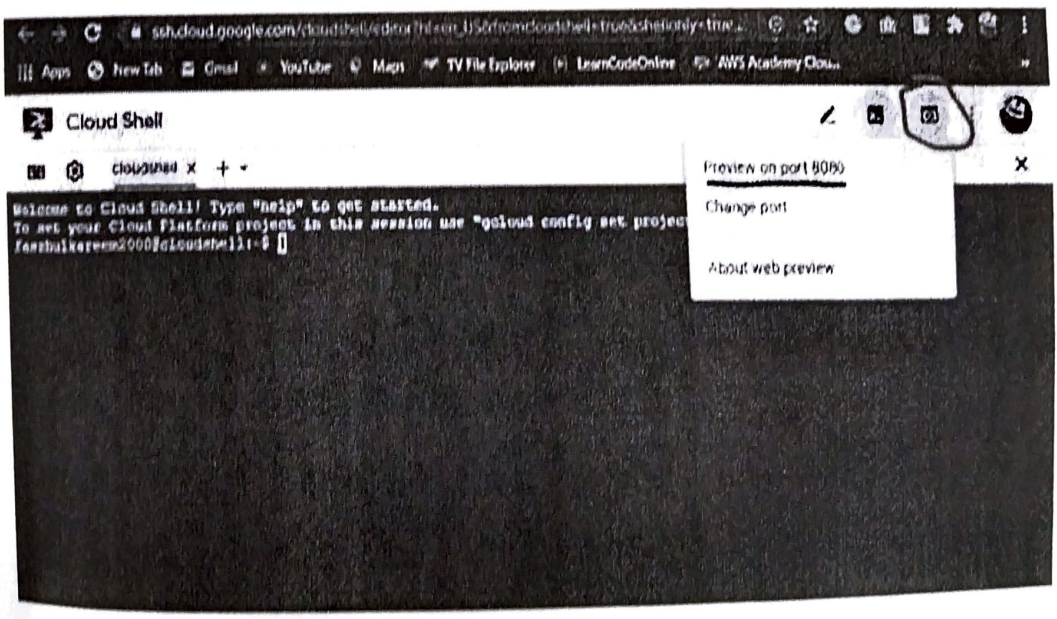
Step 3: Click the cloud shell icon on TOP RIGHT CORNOR



Step 4: Once the shell is open, enter the following commands:

1. gcloud app create
2. git clone https://github.com/GoogleCloudPlatform/python-docs-samples
3. cd python-docs-samples/appengine/standard_python3/hello_world
4. virtualenv --python python3 ~/envs/hello_world
5. source ~/envs/hello_world/bin/activate
6. pip install -r requirements.txt
7. python main.py

Step 5: Then click “web preview” and select “preview on port 8080”



Step 6: To Deploy the program, enter the following command:

gcloud app deploy app.yaml

RESULT

Thus the process of executing HELLO WORLD program in Google App Engine.